

Epidemiologic Profiles of HIV, STD, and Hepatitis in Missouri-2016



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2016 Epidemiologic Profiles of HIV, STD, and Hepatitis in Missouri

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Background

The Division of HIV/AIDS Prevention at the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA) released the *Integrated Guidelines for Developing Epidemiologic Profiles* in 2004. These guidelines are meant to assist states in creating standardized profiles that meet the planning needs of HIV prevention and care programs, while allowing freedom to portray unique situations within the state. The epidemiologic profile is divided into two sections, within which five questions are addressed.

Profile Organization:

Section 1: Core Epidemiological Questions

This section deals with understanding the characteristics of the general population, the distribution of human immunodeficiency virus (HIV) disease and sexually transmitted diseases (STDs) in the state, and a description of the population at risk for HIV and STD infection. This section is organized around three key questions:

Question 1: What are the sociodemographic characteristics of the general population of Missouri?

Describes the overall demographic and socioeconomic characteristics of the general population of Missouri.

Question 2: What is the scope of the HIV disease epidemic in Missouri?

Describes the impact of the HIV disease epidemic in Missouri.

Question 3: What are the indicators of HIV disease infection risk in Missouri?

Provides an analysis of the high-risk populations. Both the direct and indirect measures of risk behaviors associated with HIV transmission and the indicators of high-risk behaviors are described in this section.

Section 2: Ryan White HIV/AIDS Care Act Special Questions and Considerations

This section focuses on the questions that pertain to the HRSA HIV/AIDS care planning groups. It describes access to, utilization of, and standards of care among persons in Missouri who are HIV infected. It is organized around two key questions:

Question 4: What are the HIV service utilization patterns of individuals with HIV disease in Missouri?

Characterizes patterns in the use of services by the population living with HIV disease in Missouri.

Question 5: What are the number and characteristics of the individuals who know they are HIV positive but who are not in care?

Assesses the unmet need of persons who know they are HIV positive but are not in care. Describes their service needs and perception of care.

General Information:

The 2016 *Profiles* provides a selective update of the questions in the *Profiles*, including the epidemiology of HIV, STDs, hepatitis, and unmet primary medical care needs among individuals living with HIV through 2016. Please refer to the data sources used in the *Profiles* on page ii and the technical notes on page iii to develop a better understanding for interpreting the data presented. Additional sections of the *Profiles* are dedicated to providing data specific to each of the six HIV planning regions to assist with regional-level planning efforts.

Missouri Planning Cycle:

The statewide Missouri Comprehensive Prevention Planning Group (CPPG) operates on a five-year planning cycle. The current comprehensive prevention plan was developed in 2010 and runs from 2011 to 2017. To best serve the CPPG planning process, updates to the epidemiologic profile are designed to coincide with the CPPG's planning cycle. As a result, a complete update of all five questions of the epidemiologic profile is completed every five years, coinciding with the development of the new comprehensive HIV prevention plan. In the other years, updates will only be made to selected questions of the *Profiles*. The current *Profiles* represent a selective update to all questions in the *Profiles*. For data from the most recent comprehensive *Profiles*, please refer to the 2014 *Epidemiologic Profiles*, which can be accessed at <http://health.mo.gov/data/hivstdaids/pdf/MOHIVSTD2014.pdf>.

Data Sources

1. Population Data

Population Estimates, Missouri Department of Health and Senior Services (DHSS), Bureau of Health Care Analysis and Data Dissemination (BHCADD) and U.S. Census Bureau

DHSS maintains population files for Missouri and its counties based on data provided by the U.S. Census Bureau in partnership with the Federal-State Cooperative Program for Population Estimates. Census counts are produced every ten years, with the 2010 census representing the most recent census. Population estimates are produced for non-census years based on adjustments made to the most recent census counts. Due to the time required to compute the estimates, the most recent year's estimates are not available for use in the *Profiles*, and the 2015 population estimates are used instead. Beginning with the 2008 population estimates, new race/ethnicity categories are being used, which include a separate estimate for persons identifying as more than one race. This change reflects the current level of race/ethnicity detail that is captured for HIV surveillance data. As a result of the change, the population estimates from *Profiles* prior to 2009 will not be comparable with the current *Profiles*.

2. HIV Epidemic Data

HIV/Stage 3 (AIDS) Surveillance Data, eHARS

Missouri's communicable disease reporting rule, 19 CSR 20-20.020, established reporting of stage 3 (AIDS) cases in 1983, named HIV cases in 1987, CD4 lymphocyte counts in 1991, and HIV viral load lab results in 2000. Additionally, in 2016, Missouri's communicable disease reporting rule was updated to include the reporting of the following: CD4 lymphocyte percent; all test results used for diagnosis or monitoring of HIV infection and all test results (positive and negative) in the test series that indicate HIV infection; pregnancy among newly identified or pre-existing HIV positive women; and negative, undetectable, or indeterminate HIV lab results occurring within 180 days prior to the test result used for diagnosis of HIV infection.

Demographic information, vital status, mode of exposure, laboratory results, and treatment and service referrals are collected on standardized case report forms and laboratory reports. The DHSS, Bureau of Reportable Disease Informatics (BRDI) is responsible for managing the HIV/stage 3 (AIDS) surveillance data, stored in the enhanced HIV/AIDS Reporting System (eHARS). Evaluations have shown a high level of completeness of the surveillance system. However, the surveillance system primarily collects information only on individuals diagnosed with HIV disease in Missouri. Some information regarding those currently living with HIV in Missouri is maintained in eHARS but is not complete. Therefore, the *Profiles* only include data on those whose most recent diagnosis (HIV or stage 3 (AIDS)) occurred in Missouri. The data collected in the surveillance system are based on diagnosis date and not the time of infection. The diagnosis can be made at any clinical stage of the disease. The characteristics associated with new diagnoses may thus not reflect characteristics associated with recent infection. The surveillance system only includes data on individuals who are tested confidentially and reported. Members of certain subpopulations may be more or less likely to be tested, and therefore, different subpopulations could be over- or under-represented among diagnosed and reported HIV cases.

3. HIV-Related Indicators of Risk Data

Hepatitis Surveillance Data, DHSS, WebSurv

Missouri's communicable disease reporting rule, 19 CSR 20-20.020, requires reporting of acute and chronic hepatitis B and C, perinatal hepatitis B, and prenatal hepatitis B within three days to the local health authority or DHSS. Demographic information, vital status, laboratory results, and treatment information are collected on standardized report forms and laboratory reports. DHSS BRDI is responsible for managing the hepatitis surveillance data, stored in the Missouri Health Surveillance Information System (WebSurv). Limitations of the data include incomplete race/ethnicity information and underreporting.

STD Surveillance Data, WebSurv

Missouri's communicable disease reporting rule, 19 CSR 20-20.020, requires reporting of chlamydia and gonorrhea cases within three days, and syphilis, including congenital syphilis, within one day to the local health authority or DHSS. Demographic information, vital status, laboratory results, and treatment information are collected on standardized report forms and laboratory reports. DHSS BRDI is responsible for managing all reportable STD surveillance data. STD data collected through 2011 were managed in the STD Management Information System (STD*MIS). Near the end of 2011, DHSS BRDI began utilizing WebSurv to collect and manage STD surveillance data. The change in databases must be considered when assessing changes in STD cases reported since 2012 compared to prior years. Data in this system are presented based on the date of report to the health department and not the diagnosis date. The data represent only those individuals tested and reported, which underestimates the true burden of infection as

many infected individuals do not seek care, often due to a lack of symptoms. In addition, many people receive treatment without being tested, again underestimating the true burden of infection. Since morbidity is frequently entered based on the receipt of laboratory reports at DHSS, race and ethnicity information is often not available. Incomplete race and ethnicity reporting limits the interpretation of trends for these characteristics.

Tuberculosis Disease Surveillance Data, WebSurv

Missouri's communicable disease reporting rule, 19 CSR 20-20.020, requires reporting of tuberculosis disease within one day to the local health authority or DHSS. Demographic information, vital status, laboratory results, and treatment information are collected on standardized report forms and laboratory reports. DHSS Bureau of Communicable Disease Control and Prevention (BCDCP) is responsible for managing the tuberculosis surveillance data stored in WebSurv. Limitations of the data include incomplete race/ethnicity information and underreporting.

4. HIV Care Services Data

HIV Case Management Data, SCOUT

DHSS participates in a cooperative agreement with HRSA for the provision of several programs funded by the Ryan White HIV Treatment Modernization Act. Data for persons served by these programs are collected and stored in the Securing Client Outcomes Using Technology (SCOUT) database. Data include key demographic and eligibility-related variables for persons residing in Missouri and portions of Illinois and Kansas. These data are used to monitor the level of need and the provision of services for individuals utilizing Ryan White funded services.

Technical Notes

Revised HIV Surveillance Case Definition: Case definitions are used for all national reportable conditions. Case definitions are standardized sets of requirements to determine whether an individual is counted as a case for a particular disease. Case definitions allow states to count cases in a standard fashion so that data can be compared across the nation. When changes in testing technology and in the understanding of a disease occur, revisions to case definitions may occur. The HIV surveillance case definition was revised in 2014 in large part to account for the implementation of the new HIV testing algorithms that no longer required the western blot as the confirmatory test. A major change to remove the distinction between HIV cases and AIDS cases occurred in the 2014 revised surveillance case definition. All individuals infected with HIV disease are classified as HIV disease with progression of the disease classified as stages (0-3). For more information, visit <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6303a1.htm>.

Stage 3 (AIDS): Stage 3 (AIDS) represents an advanced stage of HIV infection when the CD4+T-lymphocyte values are usually persistently depressed. Stages are defined primarily based on the CD4+T-lymphocyte values and age. For additional information, visit <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6303a1.htm>.

HIV Disease, HIV Case, Stage 3 (AIDS) Case: HIV disease includes all individuals diagnosed with HIV regardless of the stage of disease progression. All persons with HIV disease can be sub-classified as **either a stage 3 (AIDS) case** (if they are in the later stages of the disease process and have met the case definition for stage 3 (AIDS)) **or an HIV case** (if they are in the earlier stages of the disease process and have not met the stage 3 (AIDS) case definition). In this report, the sub-classification of HIV or stage 3 (AIDS) is based on an individual's status of disease progression as of December 31, 2016.

Date of Diagnosis: Represents the date an individual was first diagnosed with HIV, regardless of the stage of disease progression. However, in many instances the initial diagnosis of infection does not occur until several years after the initial infection, so at best the trends in diagnosed HIV cases can only approximate actual trends in new HIV infections.

Reporting Delay: Delays exist between the time HIV infection is diagnosed and the time the infection is reported to DHSS. As a result of reporting delays, case numbers for the most recent years of diagnosis may not be complete. Data from recent years should be considered provisional. The data presented in this report have not been adjusted for reporting delay. The data in this report represent all information reported to DHSS through February 28, 2017.

Place of Residence: Data are presented based on an individual's residence at time of most recent diagnosis of HIV or stage 3 (AIDS). Only cases whose most recent diagnosis occurred in Missouri are included in the analyses presented in the *Profiles*. This residence at time of most recent diagnosis may or may not correspond

Epi Profiles Summary: Introduction

with the individual's residence at the time of initial infection or with the current residence.

Vital Status: Cases are presumed to be alive unless DHSS has received notification of death. Current vital status information for cases is ascertained through routine matches with Missouri death certificates, reports of death from other states' surveillance programs, and routine site visits with major reporting sites. When comparing *Profiles*, changes in the number of living cases in a select year between the *Profiles* is due to adjustments based on results of death matching activities. Revisions for the number of persons living at the end of the year for the past ten years can be found in Figure 2 of the 2016 *Profiles*.

Exposure Category: Despite possible existence of multiple methods through which HIV can be transmitted, cases are assigned a single most likely exposure category based on a hierarchy developed by CDC. A limitation of the dataset is the large number of cases reported with an undetermined exposure category. Data on cases with missing exposure category information have been proportionately re-distributed into known exposure categories in selected analyses.

Routine Interstate Duplicate Review (RIDR): The mobility of American citizens impacts the ability to accurately track individuals living with HIV/stage 3 (AIDS). Mobility may result in the same HIV-infected person being counted in two or more different states. To help respond to potential duplication problems, CDC initiated the Interstate Duplication Evaluation Project (IDEP), now called Routine Interstate Duplicate Review (RIDR), in 2002. RIDR compares patient records throughout the nation in order to identify duplicate cases. The states with duplicate cases contact one another to compare patient profiles in order to determine the state to which the case belongs, based on residence on the earliest date of diagnosis. Because of this process, the cumulative number of cases within Missouri may change, but the process has increased the accuracy of Missouri's data by reducing the chance that a case has been counted more than once nationally.

Small Numbers: Data release limitations are set to ensure that the information cannot be used to inadvertently identify an individual. It is difficult to make meaningful statements concerning trends in areas with low numbers of cases. Please interpret rates with a numerator of less than 20 cases with caution because of the low reliability of rates based on a small number of cases.

Glossary of Terms: A glossary of terms is located at the end of the *Profiles*. For clarification of any terms used in the *Profiles*, please feel free to contact DHSS BRDI for additional information.

Race/Ethnicity: Race and ethnicity information has been collected under two different classifications in the HIV/stage 3 (AIDS) reporting system. Since many cases were reported under the old classification, the use of the race and ethnicity categories from the old classification will be maintained in this report. All cases identified with a Hispanic ethnicity will be reported in the *Profiles* as Hispanic, regardless of reported race information. In the text of this document, whenever cases are being discussed, the term "white" means white, not Hispanic, and "black/African American" means black/African American, not Hispanic. The number of cases reported as "not Hispanic" may include individuals whose ethnicity was not reported. Individuals who reported multiple racial categories or whose race was unknown are included in the category "other/unknown" or "two or more races/unknown" depending on the table or figure.

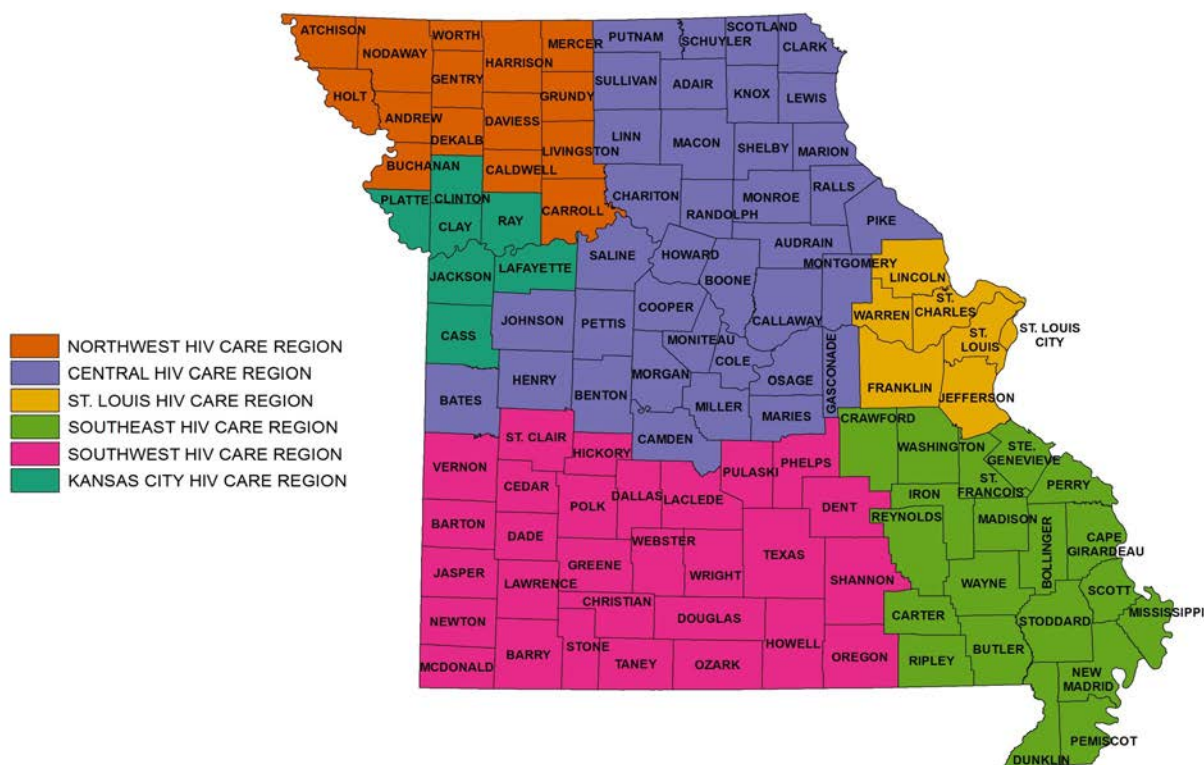
Diagnoses in Correctional Facilities: For persons living in Missouri correctional facilities (which include state, county, and local facilities) at the time of their HIV/stage 3 (AIDS), chlamydia, or gonorrhea diagnosis, the location of the correctional facility is considered the individual's residence at diagnosis. For persons living in Missouri correctional facilities at the time of their syphilis diagnosis, the residence at diagnosis is considered the individual's address prior to being incarcerated. Data for persons diagnosed in Missouri correctional facilities are included in the statewide data, since most of these individuals were likely Missouri residents prior to incarceration. However, diagnoses in Missouri correctional facilities are not included in the HIV/stage 3 (AIDS) data for the six HIV care regions of the state. This exclusion at the regional level is based on the fact that these individuals, especially those in the state prison system, are often incarcerated in a different location than where they were residing (and were likely infected) prior to imprisonment. If included among the cases from the area where imprisoned at the time of diagnosis, it would distort the picture of the epidemic in that area. Individuals diagnosed at federal correctional facilities in Missouri are not included in any data presented.

Anonymous Testing: The data do not include cases of HIV infection reported or diagnosed in persons anonymously tested at the state's four anonymous testing sites in St. Louis City, Kansas City, Springfield, and Columbia.

Geographic Area vs. HIV Region: When data are presented by geographic area, St. Louis City represents individuals diagnosed in the St. Louis City limits. St. Louis County represents individuals diagnosed in St. Louis County. Kansas City represents individuals diagnosed in the Kansas City limits. Outstate represents individuals diagnosed in all other areas. Refer to the map below for the counties included when data are presented by HIV care region.

HIV Care Region vs. HIV Region: Prior to the 2014 *Profiles*, the state was divided into geographic regions known as HIV Regions using the HIV prevention planning regions. Based on guidance from the DHSS, Bureau of HIV, STD, and Hepatitis (BHS), the data in the *Profiles* from 2014 and later are presented by HIV care regions in an effort to align with future goals to have a single definition for the geographic regions used for HIV planning. HIV care regions use the HIV medical case management (care) regions (see map below). The transition to care regions resulted in some changes. The North Central HIV Region is now known as the Central HIV Care Region. The remaining five regions maintained the same names. The counties comprising the St. Louis, Southeast, and Southwest HIV Care Regions remained the same. The Northwest HIV Care Region no longer contains Clinton County. Clinton County now belongs to the Kansas City HIV Care Region. The Kansas City HIV Care Region no longer contains Johnson, Bates, Henry, and Benton Counties. These four counties now belong in the Central HIV Care Region. Regional data in the 2014 *Profiles* and later should not be compared to previous *Profiles*. Additionally, calculations for the past ten years were recalculated using the HIV care regions at the regional level in order to accurately display trends over time in the *Profiles* for 2014 and later.

MISSOURI HIV CARE REGIONS



Revised Hepatitis Surveillance Case Definition: The hepatitis C surveillance case definition was revised in 2016 largely due to the evolution and improvement of diagnostic tests and because of the realization that infected individuals can clear a hepatitis C infection and potentially become re-infected in their lifetime. The improvements that have been made in laboratory reporting, namely electronic laboratory reporting, have made it easier for some states to receive laboratory results, including those that meet the revised case definition for hepatitis C. However, WebSurv is not currently capable of storing certain hepatitis C conditions that meet the revised case definition, namely conditions considered to be probable based on a positive hepatitis C antibody test and conditions considered to be new diagnoses due to re-infection. Until WebSurv can be amended to account for these changes, hepatitis C cases will likely be underreported in Missouri. For more information about the revised case definition, visit <https://www.cdc.gov/nndss/conditions/hepatitis-c-chronic/case-definition/2016/>.

Abbreviations

AIDS=Acquired Immunodeficiency Syndrome

BCDCP=Bureau of Communicable Disease Control and Prevention

BHCADD=Bureau of Health Care Analysis and Data Dissemination

BHSH=Bureau of HIV, STD, and Hepatitis

BRDI=Bureau of Reportable Disease Informatics

CDC=Centers for Disease Control and Prevention

CPPG=Comprehensive Prevention Planning Group

eHARS=enhanced HIV/AIDS Reporting System

HCV=Hepatitis C Virus

HIV=Human Immunodeficiency Virus

IDEP=Interstate Duplicate Evaluation Project

IDU=Injection drug use/Injection drug user

HRH=High-risk heterosexual contact

HRSA=Health Resources and Services Administration

DHSS=Missouri Department of Health and Senior Services

MICA=Missouri Information for Community Assessment

MSM=Men who have sex with men

MSM/IDU=Men who have sex with men and inject drugs

NIR=No indicated risk

P&S=Primary and secondary

RIDR=Routine Interstate Duplicate Review

SCOUT=Securing Client Outcomes Using Technology

STD=Sexually Transmitted Disease

STD*MIS=Sexually Transmitted Disease Management Information System

TB=Tuberculosis



MISSOURI STATE SUMMARY

Population Counts, by HIV Care Region, Missouri, 2015

	St. Louis HIV Care Region	Kansas City HIV Care Region	Northwest HIV Care Region	Central HIV Care Region	Southwest HIV Care Region	Southeast HIV Care Region	Missouri Total
Sex							
Male	1,024,171	583,302	112,623	438,629	578,360	247,960	2,985,045
Female	1,095,225	613,777	111,502	441,997	585,519	250,607	3,098,627
Total	2,119,396	1,197,079	224,125	880,626	1,163,879	498,567	6,083,672
Race/Ethnicity							
White	1,541,050	863,353	201,118	773,935	1,034,925	443,176	4,857,557
Black/African American	409,501	186,305	8,456	44,703	24,892	31,903	705,760
Hispanic	61,192	89,172	7,968	27,367	51,190	10,678	247,567
Asian/Pacific Islander	64,779	24,299	2,209	14,568	16,913	3,438	126,206
American Indian/Alaskan Native	4,369	5,124	897	3,323	10,353	1,976	26,042
Two or More Races/Other Race	38,505	28,826	3,477	16,730	25,606	7,396	120,540
Total	2,119,396	1,197,079	224,125	880,626	1,163,879	498,567	6,083,672
Race/Ethnicity-Males							
White Male	753,975	422,197	99,373	383,199	510,670	218,953	2,388,367
Black/African American Male	186,261	87,612	5,572	24,384	14,909	17,126	335,864
Hispanic Male	31,407	45,301	4,365	14,162	26,993	5,622	127,850
Asian/Pacific Islander Male	31,248	11,629	1,120	6,820	7,699	1,580	60,096
American Indian/Alaskan Native Male	2,164	2,517	468	1,754	5,255	964	13,122
Two or More Races/Other Race Male	19,116	14,046	1,725	8,310	12,834	3,715	59,746
Total	1,024,171	583,302	112,623	438,629	578,360	247,960	2,985,045
Race/Ethnicity-Females							
White Female	787,075	441,156	101,745	390,736	524,255	224,223	2,469,190
Black/African American Female	223,240	98,693	2,884	20,319	9,983	14,777	369,896
Hispanic Female	29,785	43,871	3,603	13,205	24,197	5,056	119,717
Asian/Pacific Islander Female	33,531	12,670	1,089	7,748	9,214	1,858	66,110
American Indian/Alaskan Native Female	2,205	2,607	429	1,569	5,098	1,012	12,920
Two or More Races/Other Race Female	19,389	14,780	1,752	8,420	12,772	3,681	60,794
Total	1,095,225	613,777	111,502	441,997	585,519	250,607	3,098,627
Age							
<2	51,281	31,309	5,338	20,931	28,972	12,079	149,910
2-12	290,192	177,211	29,934	116,939	161,985	69,529	845,790
13-18	164,065	94,660	16,841	66,982	91,947	38,270	472,765
19-24	161,161	86,335	20,876	94,564	108,643	38,831	510,410
25-44	553,035	324,009	54,067	209,546	279,145	119,640	1,539,442
45-64	581,502	315,057	58,316	226,571	294,954	134,033	1,610,433
65+	318,160	168,498	38,753	145,093	198,233	86,185	954,922
Total	2,119,396	1,197,079	224,125	880,626	1,163,879	498,567	6,083,672

Source: DHSS, Bureau of Health Care Analysis and Data Dissemination (BHCADD)

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Key Highlights: What is the scope of the HIV disease epidemic in Missouri?

Magnitude of the Problem and General Trends

- From 1982 to 2016, a total of 20,913 persons have been diagnosed with HIV disease in Missouri and reported to DHSS. Of these individuals, 13,925 (67%) were subcategorized as stage 3 (AIDS) cases, and the remaining 6,988 (33%) were subcategorized as HIV cases. Of the cumulative number of persons diagnosed with HIV disease, 12,606 (60%) were presumed to be living at the end of 2016.
- The number of new diagnoses has fluctuated slightly between 2007 and 2016, with no sustained upward or downward trend in new HIV diagnoses over this time period. In 2016, there were 517 persons newly diagnosed with HIV disease. However, this value has not been adjusted for reporting delays and therefore is likely to change.
- The number of persons living with HIV disease continued to increase every year, from 9,512 persons in 2007 to 12,606 persons in 2016. The increase is primarily due to the fact that individuals are living longer with the disease as a result of improved treatment and medical care.

Where

- HIV disease disproportionately impacts the state's two major metropolitan areas (St. Louis and Kansas City). The highest rates of new diagnoses and persons living with HIV disease were found in these two areas.
- The rate of persons newly diagnosed who remained classified as HIV cases at the end of 2016 was highest in St. Louis City (33.3 per 100,000). The second highest rate was in Kansas City (20.0 per 100,000). The rate of persons newly diagnosed who were classified as stage 3 (AIDS) cases at the end of 2016 was highest in Kansas City (6.1 per 100,000).

Who

Sex

- Males represented the majority of persons newly diagnosed (81%) and living with (83%) HIV disease. The rates of new diagnoses and persons living with HIV disease were nearly five times higher among males compared to females.

Race/Ethnicity

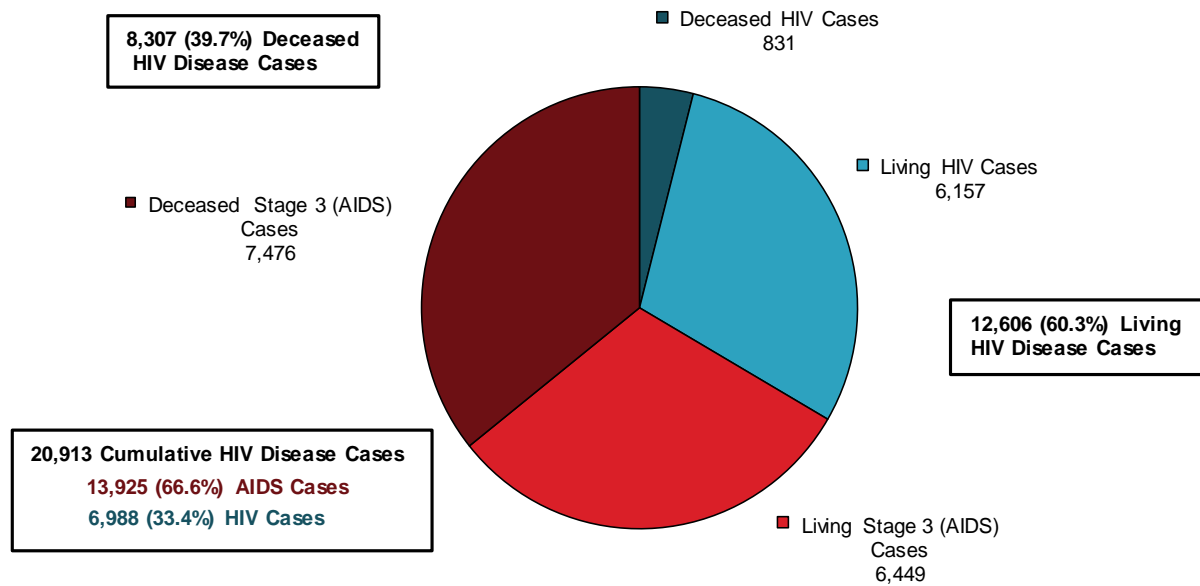
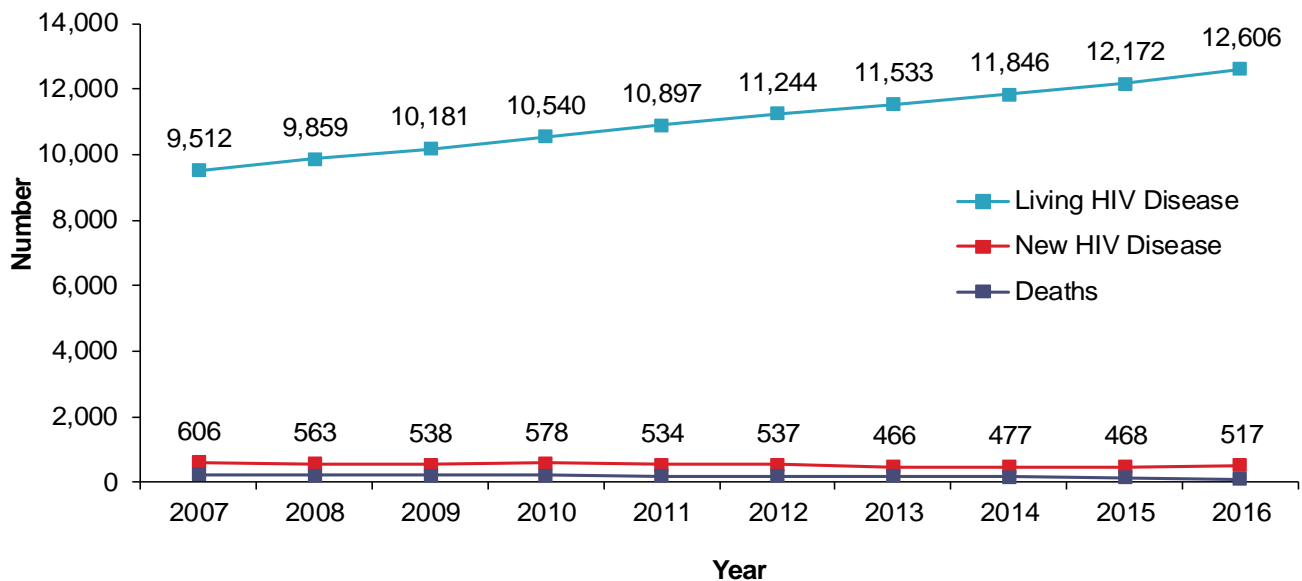
- HIV disease continues to disproportionately impact people of color. The rate of newly diagnosed HIV disease cases among blacks/African Americans was 8 times as high among whites, and 3.6 times as high among Hispanics compared to whites. The disparity was even greater among black/African American females. While black/African American females represented only 12% of Missouri's female population, they accounted for 60% of new female HIV disease diagnoses. It should be emphasized that race/ethnicity in itself is not a risk factor for HIV infection; however, among many racial/ethnic populations, social, economic, and cultural factors are associated with high rates of HIV risk behavior. These factors also may be barriers to receiving HIV prevention information or accessing HIV testing, diagnosis, and treatment.

Age

- The age of individuals living with HIV disease has increased over time. In 2007, the largest numbers of persons living with HIV disease were 40 to 44 years of age, whereas in 2016 persons 50 to 54 years old represented the largest number of living cases.
- Although the age of persons living with the disease has increased over time, the age of new diagnoses has remained relatively consistent. In both 2007 and 2016, the largest numbers of persons newly diagnosed with HIV disease were between 19 and 24 years of age.

Exposure Category

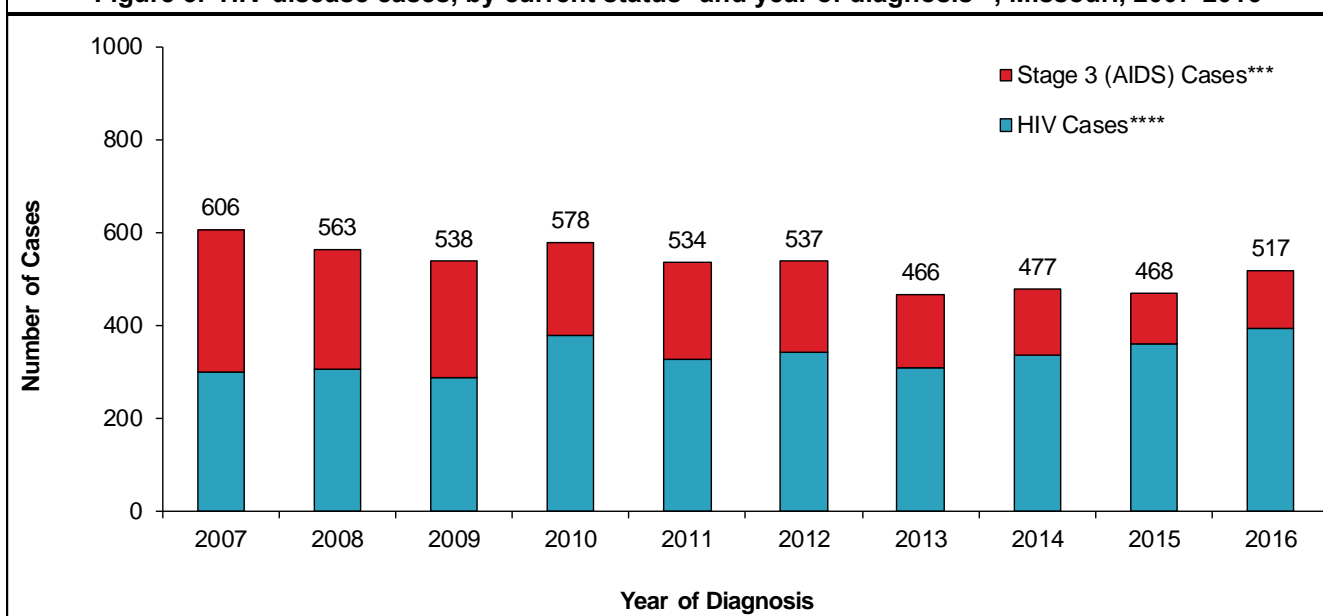
- The majority of new diagnoses continue to be attributed to men who have sex with men (MSM). Among females, heterosexual contact was the primary mode of transmission. In 2016, there were seven people less than 13 years of age diagnosed with HIV disease.

Figure 1. HIV disease cases (living and deceased), by current HIV vs. stage 3 (AIDS) status, Missouri, 1982-2016**Figure 2. Living and new HIV disease cases and deaths, by year*, Missouri, 2007-2016**

*Living HIV disease cases represent the number of individuals living with HIV disease at the end of the year. New HIV disease cases represent the number of individuals newly diagnosed in the year. HIV disease deaths represent the number of individuals who died in the year.

From 1982 to 2016, a total of 20,913 HIV disease cases have been diagnosed in Missouri and reported to DHSS (Figure 1). Of the 20,913 cumulative cases reported, 60% were still presumed to be living with HIV disease at the end of 2016. Among the 12,606 persons living with HIV disease, 6,157 were classified as HIV cases at the end of 2016 and 6,449 were classified as stage 3 (AIDS) cases.

At the end of 2016, there were 12,606 persons living with HIV disease whose most recent diagnosis occurred in Missouri (Figure 2). The number of people living with HIV disease increased each year. There were 517 new HIV disease diagnoses in 2016. The number of new diagnoses each year from 2007 to 2016 has fluctuated. The number of deaths among persons with HIV disease each year has remained generally steady. The lower number of deaths in 2016 (83) was likely due to delays in death reporting.

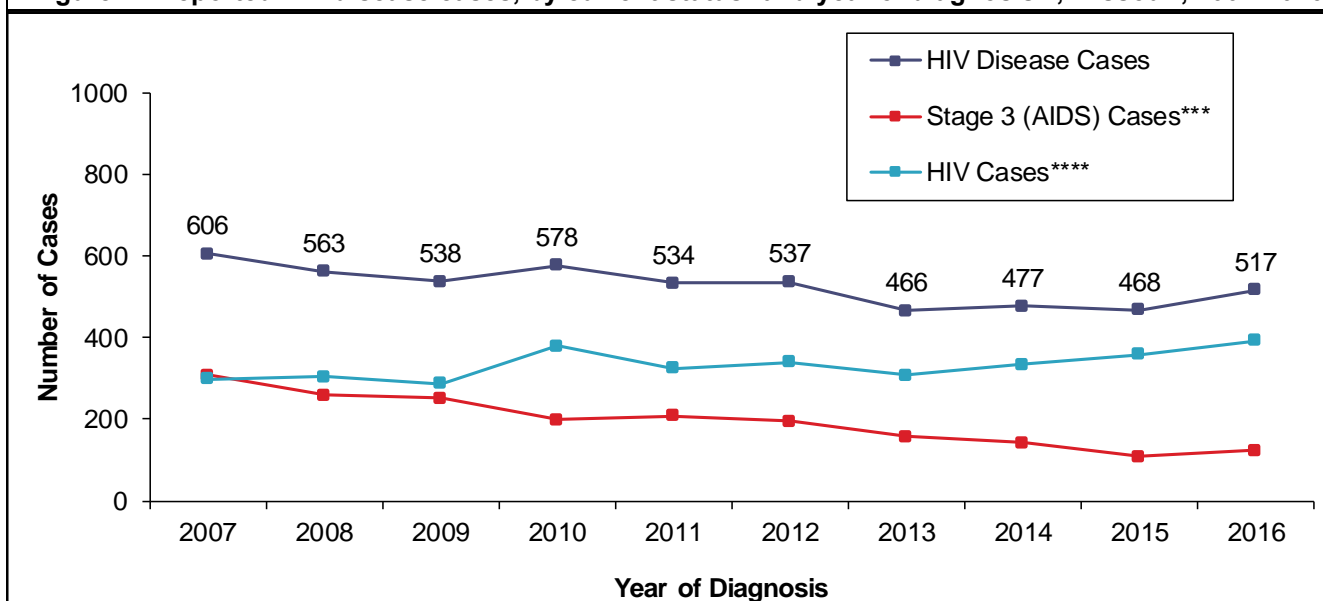
Figure 3. HIV disease cases, by current status* and year of diagnosis, Missouri, 2007-2016**

*HIV case vs. stage 3 (AIDS) case.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, Missouri, 2007-2016**

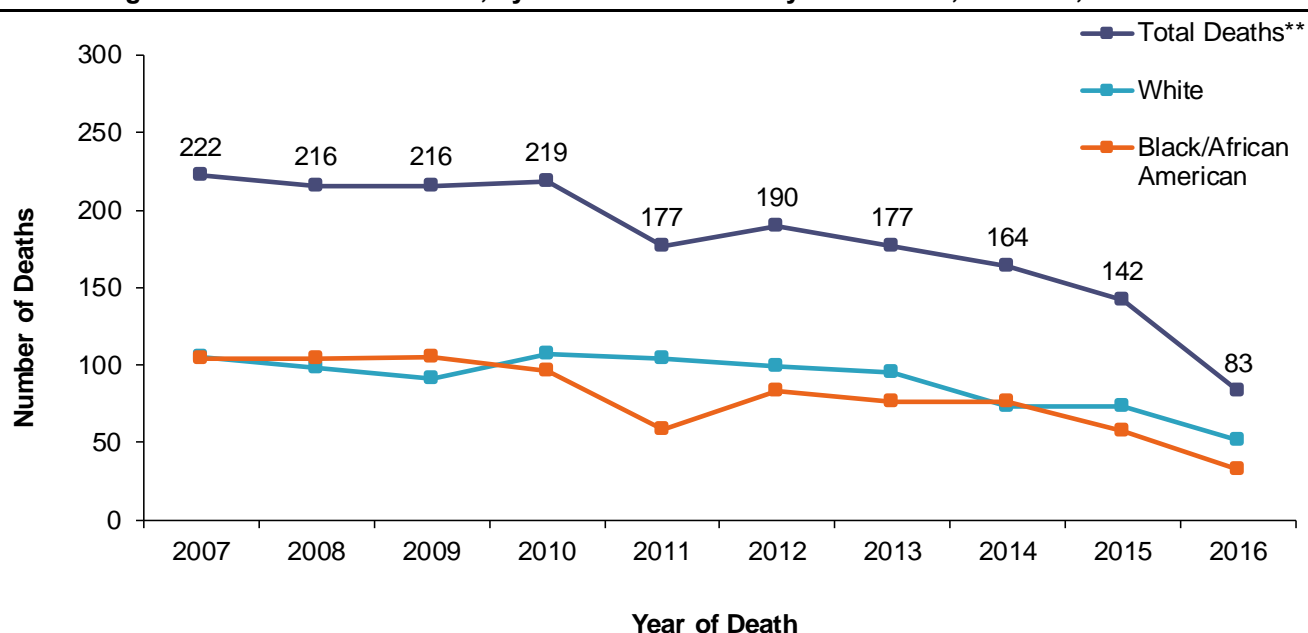
*HIV case vs. stage 3 (AIDS) case.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

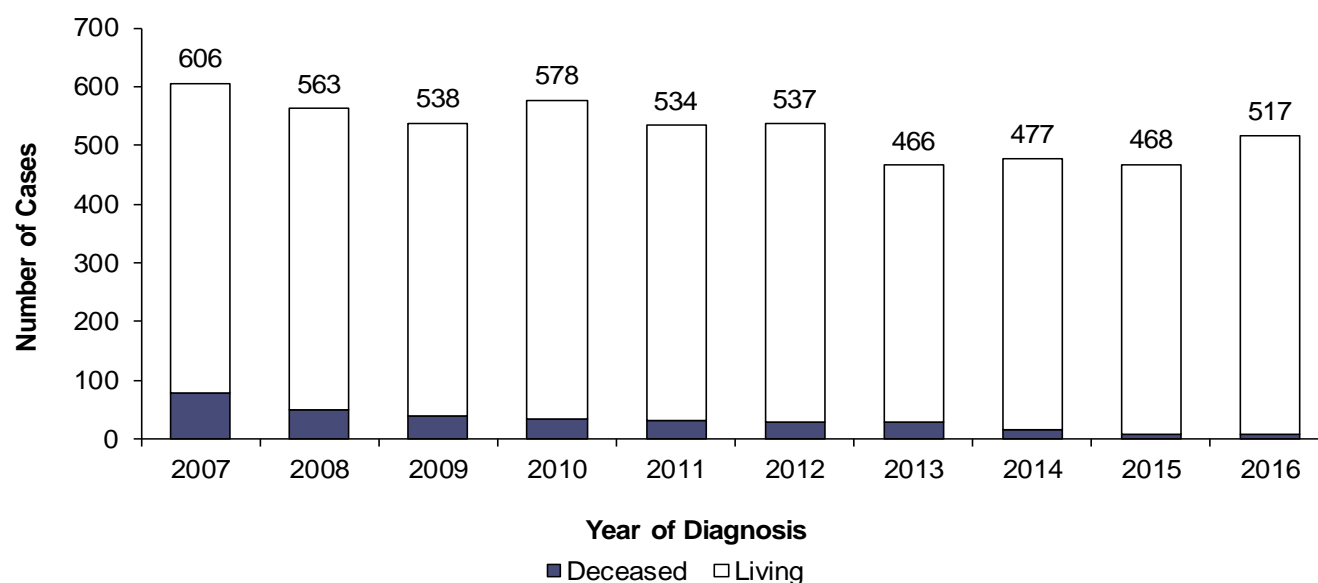
Between 2007 and 2016, the number of new HIV disease diagnoses has ranged from 466 cases in 2013 to 606 cases in 2007 (Figures 3 and 4). The number of new diagnoses fluctuated slightly between 2007 and 2016, with no sustained upward or downward trend in new HIV diagnoses over this time period. Differences in the number of persons sub-classified as stage 3 (AIDS) cases each year are due to the progression of the disease over time. For those diagnosed with HIV disease in 2007, a larger number are currently classified as stage 3 (AIDS) cases compared to those diagnosed in 2016 because they have been living with the virus longer.

Figure 5. HIV disease deaths*, by selected race and year of death, Missouri, 2007-2016†**

*Includes deaths that have occurred among those diagnosed with HIV disease in Missouri.

**Total deaths include persons of all races.

†Only includes deaths through December 31, 2016, and reported by February 28, 2017.

Figure 6. Persons diagnosed with HIV disease, by current vital status* and year of diagnosis, Missouri, 2007-2016**

*Vital status on December 31, 2016.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

The number of deaths among persons with HIV disease remained generally steady from 2007 to 2010 and then decreased from 2010 to 2011. The number of deaths steadily decreased between 2011 and 2015 (Figure 5). The lower number of deaths in 2016 (83) is likely due to delays in death reporting. Of the 606 persons diagnosed with HIV disease in 2007, 77 (13%) were deceased by the end of 2016 (Figure 6). Among the 517 cases first diagnosed in 2016, 7 (1%) were deceased at the end of 2016. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease.

Table 1. Living[†] HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Missouri, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	5,051	82.0%	169.2	5,366	83.2%	179.8	10,417	82.6%	349.0
Female	1,106	18.0%	35.7	1,083	16.8%	35.0	2,189	17.4%	70.6
Total	6,157	100.0%	101.2	6,449	100.0%	106.0	12,606	100.0%	207.2
Race/Ethnicity									
White	2,952	47.9%	60.8	3,066	47.5%	63.1	6,018	47.7%	123.9
Black/African American	2,807	45.6%	397.7	2,961	45.9%	419.5	5,768	45.8%	817.3
Hispanic	271	4.4%	109.5	291	4.5%	117.5	562	4.5%	227.0
Asian/Pacific Islander	50	0.8%	39.6	38	0.6%	30.1	88	0.7%	69.7
American Indian/Alaskan Native	6	0.1%	23.0	4	0.1%	15.4	10	0.1%	38.4
Two or More Races/Unknown	71	1.2%	--	89	1.4%	--	160	1.3%	--
Total	6,157	100.0%	101.2	6,449	100.0%	106.0	12,606	100.0%	207.2
Race/Ethnicity-Males									
White Male	2,583	51.1%	108.1	2,745	51.2%	114.9	5,328	51.1%	223.1
Black/African American Male	2,141	42.4%	637.5	2,271	42.3%	676.2	4,412	42.4%	1313.6
Hispanic Male	227	4.5%	177.6	247	4.6%	193.2	474	4.6%	370.7
Asian/Pacific Islander Male	39	0.8%	64.9	26	0.5%	43.3	65	0.6%	108.2
American Indian/Alaskan Native Male	6	0.1%	45.7	4	0.1%	30.5	10	0.1%	76.2
Two or More Races/Unknown Male	55	1.1%	--	73	1.4%	--	128	1.2%	--
Total	5,051	100.0%	169.2	5,366	100.0%	179.8	10,417	100.0%	349.0
Race/Ethnicity-Females									
White Female	369	33.4%	14.9	321	29.6%	13.0	690	31.5%	27.9
Black/African American Female	666	60.2%	180.1	690	63.7%	186.5	1,356	61.9%	366.6
Hispanic Female	44	4.0%	36.8	44	4.1%	36.8	88	4.0%	73.5
Asian/Pacific Islander Female	11	1.0%	16.6	12	1.1%	18.2	23	1.1%	34.8
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	16	1.4%	--	16	1.5%	--	32	1.5%	--
Total	1,106	100.0%	35.7	1,083	100.0%	35.0	2,189	100.0%	70.6
Current Age[†]									
<2	0	0.0%	0.0	1	0.0%	0.7	1	0.0%	0.7
2-12	30	0.5%	3.5	2	0.0%	0.2	32	0.3%	3.8
13-18	45	0.7%	9.5	9	0.1%	1.9	54	0.4%	11.4
19-24	392	6.4%	76.8	92	1.4%	18.0	484	3.8%	94.8
25-44	2,833	46.0%	184.0	1,802	27.9%	117.1	4,635	36.8%	301.1
45-64	2,564	41.6%	159.2	4,081	63.3%	253.4	6,645	52.7%	412.6
65+	293	4.8%	30.7	462	7.2%	48.4	755	6.0%	79.1
Total	6,157	100.0%	101.2	6,449	100.0%	106.0	12,606	100.0%	207.2

[†]Includes persons diagnosed with HIV disease in Missouri who are currently living, regardless of current residence. Includes persons diagnosed in Missouri correctional facilities.

*Cases which remained HIV cases at the end of 2016.

**Cases classified as stage 3 (AIDS) by December 31, 2016.

***The sum of HIV cases and stage 3 (AIDS) cases.

****Per 100,000 population based on 2015 DHSS estimates.

[†]Based on age as of December 31, 2016.

Note: Percentages may not total 100% due to rounding.

Table 2. Diagnosed HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Missouri, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	324	82.4%	10.9	94	75.8%	3.1	418	80.9%	14.0
Female	69	17.6%	2.2	30	24.2%	1.0	99	19.1%	3.2
Total	393	100.0%	6.5	124	100.0%	2.0	517	100.0%	8.5
Race/Ethnicity									
White	153	38.9%	3.1	60	48.4%	1.2	213	41.2%	4.4
Black/African American	196	49.9%	27.8	54	43.5%	7.7	250	48.4%	35.4
Hispanic	30	7.6%	12.1	9	7.3%	3.6	39	7.5%	15.8
Asian/Pacific Islander	5	1.3%	4.0	0	0.0%	0.0	5	1.0%	4.0
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	9	2.3%	7.5	1	0.8%	0.8	10	1.9%	--
Total	393	100.0%	6.5	124	100.0%	2.0	517	100.0%	8.5
Race/Ethnicity-Males									
White Male	131	40.4%	5.5	51	54.3%	2.1	182	43.5%	7.6
Black/African American Male	155	47.8%	46.1	36	38.3%	10.7	191	45.7%	56.9
Hispanic Male	27	8.3%	21.1	6	6.4%	4.7	33	7.9%	25.8
Asian/Pacific Islander Male	4	1.2%	6.7	0	0.0%	0.0	4	1.0%	6.7
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	7	2.2%	--	1	1.1%	--	8	1.9%	--
Total	324	100.0%	10.9	94	100.0%	3.1	418	100.0%	14.0
Race/Ethnicity-Females									
White Female	22	31.9%	0.9	9	30.0%	0.4	31	31.3%	1.3
Black/African American Female	41	59.4%	11.1	18	60.0%	4.9	59	59.6%	16.0
Hispanic Female	3	4.3%	2.5	3	10.0%	2.5	6	6.1%	5.0
Asian/Pacific Islander Female	1	1.4%	1.5	0	0.0%	0.0	1	1.0%	1.5
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	2	2.9%	--	0	0.0%	--	2	2.0%	--
Total	69	100.0%	2.2	30	100.0%	1.0	99	100.0%	3.2
Current Age[†]									
<2	0	0.0%	0.0	1	0.8%	0.7	1	0.2%	0.7
2-12	4	1.0%	0.5	0	0.0%	0.0	4	0.8%	0.5
13-18	14	3.6%	2.9	4	3.2%	0.8	18	3.5%	3.8
19-24	107	27.2%	20.8	11	8.9%	2.1	118	22.8%	22.8
25-44	193	49.1%	12.7	57	46.0%	3.7	250	48.4%	16.3
45-64	72	18.3%	4.4	48	38.7%	3.0	120	23.2%	7.4
65+	3	0.8%	0.3	3	2.4%	0.3	6	1.2%	0.6
Total	393	100.0%	6.5	124	100.0%	2.0	517	100.0%	8.5

*HIV cases diagnosed during 2016 which remained HIV cases at the end of the year. Includes persons diagnosed in Missouri correctional facilities.

**Stage 3 (AIDS) cases initially diagnosed in 2016.

***The sum of newly diagnosed HIV cases and newly diagnosed stage 3 (AIDS) cases. Does not include cases diagnosed prior to 2016 with HIV which progressed to stage 3 (AIDS) in 2016.

****Per 100,000 population based on 2015 DHSS estimates.

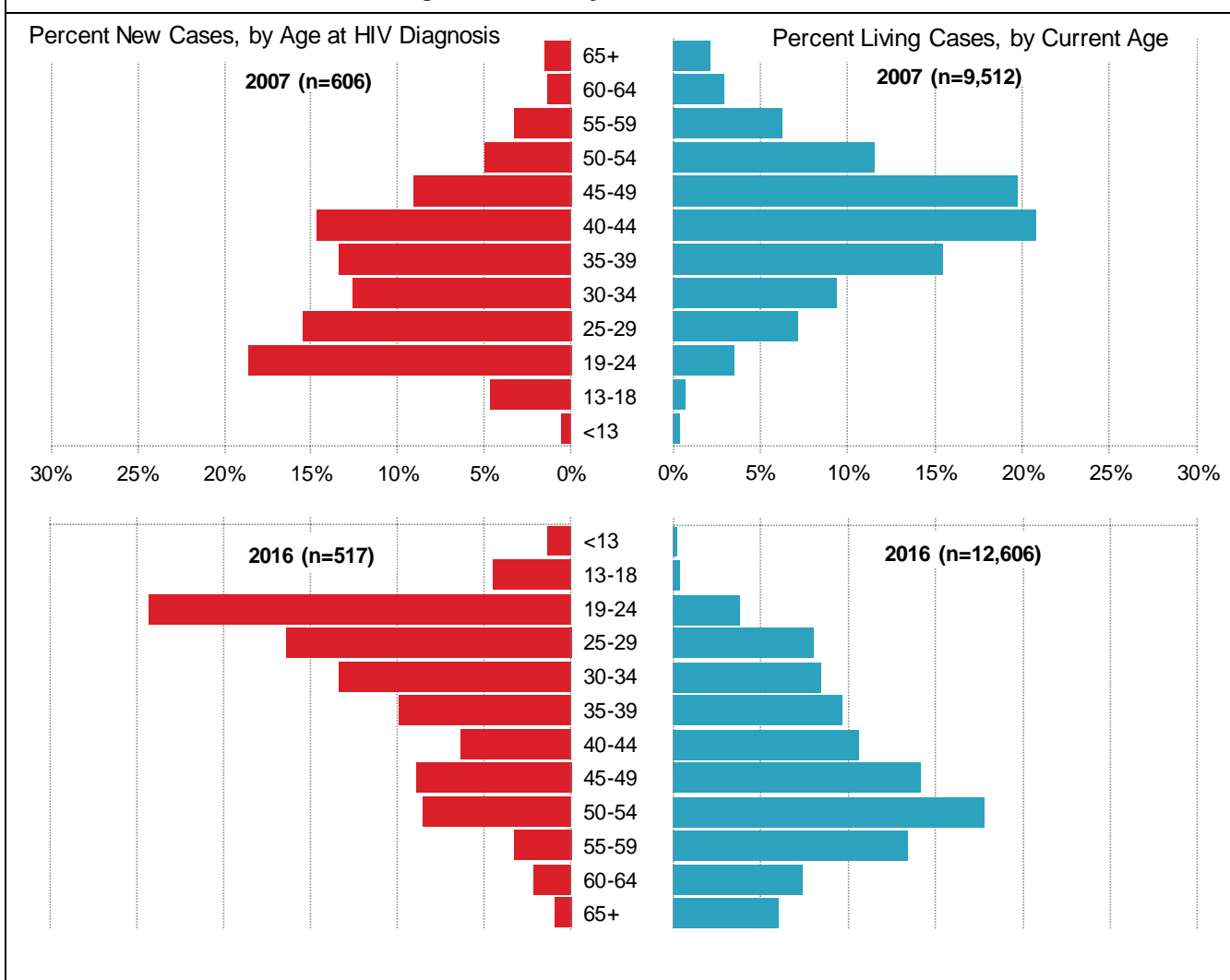
[†]Based on age as of December 31, 2016.

Note: Percentages may not total 100% due to rounding.

Of the 12,606 persons living with HIV at the end of 2016, 83% were males (Table 1). The rate of those living with HIV disease was 4.9 times as high among males compared to females. Although whites represented the largest proportion of living HIV disease cases (48%), the rate of those living with HIV disease was 6.6 times as high among blacks/African Americans compared to whites. The rate was 1.8 times as high among Hispanics compared to whites. Among males, the rate of living cases among blacks/African Americans was 5.9 times as high as the rate among whites, and 1.7 times as high among Hispanics compared to whites. Among females, the rate of those living with HIV disease among blacks/African Americans was 13.1 times as high as the rate among whites, and 2.6 times as high among Hispanics compared to whites.

Of the 517 persons newly diagnosed with HIV disease in 2016, 24% were classified as stage 3 (AIDS) cases by the end of 2016 (Table 2). The rate of new HIV disease diagnoses was 4.4 times as high among males compared to females. The rate of new HIV disease cases was 8 times as high among blacks/African Americans compared to whites and 3.6 times as high among Hispanics compared to whites. The rate of new HIV disease diagnoses was greatest among persons 19 to 24 years of age at the end of 2016 (22.8 per 100,000).

Figure 7. Distribution of new HIV disease cases, by age at diagnosis, and living HIV disease cases, by current age in selected year, Missouri, 2007 and 2016



The distribution of the age at diagnosis among new HIV disease cases has gradually shifted to younger populations over time (Figure 7). In 2007, the greatest proportion of new diagnoses occurred among those ages 19 to 24 (19%) and 25 to 29 (16%). In 2016, the greatest proportion of new diagnoses also occurred among those ages 19 to 24 (24%). Although the age of new diagnoses has decreased, the age of individuals living with HIV has increased over time. In 2007, the greatest proportion of living cases was among those ages 40 to 44 (21%). In 2016, the greatest proportion of living cases was among those 50 to 54 years old (18%).

The line graph displays the annual number of cases from 2007 to 2016 for seven categories: St. Louis, Kansas City, Northwest, Central, Southwest, Southeast, and Correctional Facilities. The y-axis represents the 'Number of Cases' ranging from 0 to 350 in increments of 50. The x-axis represents the 'Year of Diagnosis' from 2007 to 2016. St. Louis (yellow line with square markers) consistently shows the highest number of cases, fluctuating between approximately 225 and 295. Kansas City (blue line with triangle markers) is the second highest, with cases ranging from about 120 to 180. The remaining categories (Northwest, Central, Southwest, Southeast, and Correctional Facilities) all show much lower case counts, generally below 50, with some regional variation over the years.

Year of Diagnosis	St. Louis	Kansas City	Northwest	Central	Southwest	Southeast	Correctional Facilities
2007	280	175	5	30	50	35	35
2008	245	175	10	25	55	15	25
2009	260	155	10	25	35	15	25
2010	290	155	5	25	60	15	25
2011	245	180	5	25	45	15	25
2012	280	145	5	25	50	15	25
2013	245	130	5	20	30	15	25
2014	225	125	5	20	35	20	25
2015	240	115	5	20	30	20	25
2016	255	150	5	40	25	15	25

The St. Louis HIV Care Region represented the largest number of new HIV disease diagnoses in each year from 2007 to 2016 (Figure 9). However, the largest increases in new HIV disease diagnoses from 2015 to 2016 were seen in the Kansas City HIV Care Region (26%) and the Central HIV Care Region (26%). The numbers of new diagnoses reported in the St. Louis HIV Care Region fluctuated from 2007 to 2014 with slight increases seen in recent years. The numbers of new diagnoses reported in the remaining regions have remained relatively consistent from 2007 to 2016 with no sustained upward or downward trends.

Table 3. New and living HIV and stage 3 (AIDS) cases and rates, by geographic area, and by HIV care region, Missouri, 2016

Location	HIV Cases						Stage 3 (AIDS) Cases					
	Diagnosed 2016*			Living with HIV			Diagnosed 2016**			Living with Stage 3 (AIDS)		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Geographic Area												
St. Louis City†	105	26.7%	33.3	1,680	27.3%	532.2	16	12.9%	5.1	1,730	26.8%	548.0
St. Louis County†	78	19.8%	7.8	1,164	18.9%	116.0	30	24.2%	3.0	1,092	16.9%	108.8
Kansas City†	95	24.2%	20.0	1,332	21.6%	280.2	29	23.4%	6.1	1,668	25.9%	350.9
Outstate†	105	26.7%	2.4	1,646	26.7%	38.4	47	37.9%	1.1	1,795	27.8%	41.8
Missouri Correctional Facilities††	10	2.5%	N/A	335	5.4%	N/A	2	1.6%	N/A	164	2.5%	N/A
MISSOURI TOTAL	393	100.0%	6.5	6,157	100.0%	101.2	124	100.0%	2.0	6,449	100.0%	106.0
HIV Care Region												
St. Louis†	204	51.9%	9.6	3,104	50.4%	146.5	52	41.9%	2.5	3,041	47.2%	143.5
Kansas City†	114	29.0%	9.5	1,673	27.2%	139.8	36	29.0%	3.0	2,062	32.0%	172.3
Northwest†	4	1.0%	1.8	53	0.9%	23.6	4	3.2%	1.8	91	1.4%	40.6
Central†	33	8.4%	3.7	340	5.5%	38.6	10	8.1%	1.1	359	5.6%	40.8
Southwest†	19	4.8%	1.6	500	8.1%	43.0	13	10.5%	1.1	502	7.8%	43.1
Southeast†	9	2.3%	1.8	152	2.5%	30.5	7	5.6%	1.4	230	3.6%	46.1
Missouri Correctional Facilities††	10	2.5%	N/A	335	5.4%	N/A	2	1.6%	N/A	164	2.5%	N/A
MISSOURI TOTAL	393	100.0%	6.5	6,157	100.0%	101.2	124	100.0%	2.0	6,449	100.0%	106.0

*HIV cases diagnosed and reported to DHSS during 2016 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

***Per 100,000 population based on 2015 DHSS estimates.

†Does not include persons diagnosed in Missouri correctional facilities.

††Includes persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total 100% due to rounding.

There were differences in the proportion of persons newly diagnosed with HIV disease that were either concurrently diagnosed with stage 3 (AIDS) or progressed to stage 3 (AIDS) at the end of 2016 by geographic area and HIV care region (Table 3). In Outstate, 31% of newly diagnosed HIV disease cases progressed to stage 3 (AIDS) by the end of 2016. In comparison, the proportions were 28%, 23%, 17%, and 13% for St. Louis County, Kansas City, Missouri correctional facilities, and St. Louis City, respectively. In the Northwest HIV Care Region, 50% of newly diagnosed HIV disease cases progressed to stage 3 (AIDS) at the end of 2016, whereas the proportions were 44%, 41%, 24%, 23%, 20%, and 17% for the HIV care regions of Southeast, Southwest, Kansas City, Central, St. Louis, and Missouri correctional facilities, respectively. The variation in the proportion of newly diagnosed individuals that progressed to stage 3 (AIDS) by the end of 2016 among the geographic areas may be related to differences in when individuals were tested in the course of their disease progression or differences in active surveillance techniques.

The rates of new and living HIV and living stage 3 (AIDS) cases were greatest in St. Louis City (Table 3). The rate of new HIV case diagnoses in St. Louis City was 13.9 times as high as Outstate and 8.3 times as high in Kansas City compared to Outstate. The rate of new stage 3 (AIDS) case diagnoses was 5.5 times as high in Kansas City compared to Outstate and 4.6 times as high in St. Louis City compared to Outstate. This demonstrates the disproportionate impact of HIV disease in the major metropolitan areas in Missouri.

Table 4. Diagnosed HIV cases and rates, by selected race/ethnicity and geographic area, Missouri, 2016

Area	White			Black/African American			Hispanic			Total		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases**	%	Rate*
St. Louis City†	24	22.9%	17.3	75	71.4%	51.1	3	2.9%	24.5	105	100.0%	33.3
St. Louis County†	18	23.1%	2.7	54	69.2%	22.6	3	3.8%	10.7	78	100.0%	7.8
Kansas City†	35	36.8%	13.4	42	44.2%	30.1	17	17.9%	36.2	95	100.0%	20.0
Outstate Missouri†	70	66.7%	1.8	23	21.9%	12.8	5	4.8%	3.1	105	100.0%	2.4
Missouri Correctional Facilities††	6	60.0%	N/A	2	20.0%	N/A	2	20.0%	N/A	10	100.0%	N/A
MISSOURI TOTAL	153	38.9%	3.1	196	49.9%	27.8	30	7.6%	12.1	393	100.0%	6.5

*Per 100,000 population based on 2015 DHSS estimates.

**Includes cases among persons whose race/ethnicity is either unknown or not listed.

†Does not include persons diagnosed in Missouri correctional facilities.

††Includes persons diagnosed in Missouri correctional facilities.

Note: Row percentages are shown. Percentages may not total 100% due to rounding.

Table 5. Diagnosed HIV cases and rates, by selected race/ethnicity and HIV care region, Missouri, 2016

HIV Care Region	White			Black/African American			Hispanic			Total		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases**	%	Rate*
St. Louis†	57	27.9%	3.7	133	65.2%	32.5	6	2.9%	9.8	204	100.0%	9.6
Kansas City†	47	41.2%	5.4	47	41.2%	25.2	18	15.8%	20.2	114	100.0%	9.5
Northwest†	3	75.0%	1.5	1	25.0%	11.8	0	0.0%	0.0	4	100.0%	1.8
Central†	27	81.8%	3.5	5	15.2%	11.2	1	3.0%	3.7	33	100.0%	3.7
Southwest†	10	52.6%	1.0	4	21.1%	16.1	3	15.8%	5.9	19	100.0%	1.6
Southeast†	3	33.3%	0.7	4	44.4%	12.5	0	0.0%	0.0	9	100.0%	1.8
Missouri Correctional Facilities††	6	60.0%	N/A	2	20.0%	N/A	2	20.0%	N/A	10	100.0%	N/A
MISSOURI TOTAL	153	38.9%	3.1	196	49.9%	27.8	30	7.6%	12.1	393	100.0%	6.5

*Per 100,000 population based on 2015 DHSS estimates.

**Includes cases in persons whose race/ethnicity is either unknown or not listed.

†Does not include persons diagnosed in Missouri correctional facilities.

††Includes persons diagnosed in Missouri correctional facilities.

Note: Row percentages are shown. Percentages may not total 100% due to rounding.

The proportion of new HIV cases diagnosed in 2016 by race/ethnicity varied by geographic area (Table 4). Whites comprised 67% of new HIV case diagnoses in Outstate, but only 23% of new HIV cases in both St. Louis City and St. Louis County. Differences in the general population distribution of each of these geographic areas likely explain some of the variation observed. The difference in the rate of new HIV case diagnoses by race/ethnicity also varied by geographic area. In Outstate, the rate of new HIV cases among blacks/African Americans was 7.1 times as high as the rate among whites and 1.7 times as high among Hispanics compared to whites. In comparison, in St. Louis City, the rate of new HIV cases was 3 times as high in blacks/African Americans compared to whites and 1.4 times as high among Hispanics compared to whites.

Similar patterns to those observed for the geographic areas were also present by HIV care region (Table 5). In the Central HIV Care Region, whites represented 82% of new HIV case diagnoses, whereas blacks/African Americans represented the majority of cases in the St. Louis HIV Care Region (65%).

Table 6. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men, by selected race/ethnicity, Missouri, 2016

Race/Ethnicity	<u>HIV Cases*</u>				<u>Stage 3 (AIDS) Cases</u>			
	<u>Newly Diagnosed</u>		<u>Living</u>		<u>Newly Diagnosed**</u>		<u>Living</u>	
	Cases	%	Cases	%	Cases	%	Cases	%
White	103	40.4%	2,069	53.3%	34	50.7%	2,152	53.9%
Black/African American	119	46.7%	1,553	40.0%	27	40.3%	1,604	40.2%
Hispanic	23	9.0%	183	4.7%	5	7.5%	159	4.0%
Other/Unknown	10	3.9%	77	2.0%	1	1.5%	80	2.0%
MISSOURI TOTAL ***	255	100.0%	3,882	100.0%	67	100.0%	3,995	100.0%
*Remained HIV cases at the end of the year.								
**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.								
***Totals include persons diagnosed in Missouri correctional facilities.								
Note: Percentages may not total 100% due to rounding.								

Table 7. Living HIV disease cases in men who have sex with men, by selected race/ethnicity and current age group, Missouri, 2016

Age Group	<u>White</u>		<u>Black/African American</u>		<u>Hispanic</u>		<u>Total*</u>	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	1	0.0%	13	0.4%	0	0.0%	14	0.2%
19-24	66	1.6%	254	8.0%	14	4.1%	348	4.4%
25-44	1,206	28.6%	1,481	46.9%	160	46.8%	2,929	37.2%
45-64	2,597	61.5%	1,320	41.8%	154	45.0%	4,127	52.4%
65+	351	8.3%	89	2.8%	14	4.1%	459	5.8%
MISSOURI TOTAL	4,221	100.0%	3,157	100.0%	342	100.0%	7,877	100.0%
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.								
**Percentage of cases per age group.								
Note: Percentages may not total 100% due to rounding.								

The data presented for each exposure category in Tables 6 through 19 have not been adjusted to redistribute individuals with missing exposure category information. Therefore, these data represent only those individuals with an exposure category reported to DHSS. The total number of individuals in each exposure category is likely underestimated, especially among those newly diagnosed in 2016. These data are subject to change.

A total of 322 new HIV disease diagnoses were attributed to MSM in 2016 (Table 6). The number of new HIV cases among blacks/African Americans was 1.2 times as many new HIV cases among whites; however, whites represented 1.3 times the number of new stage 3 (AIDS) cases compared to blacks/African Americans in 2016. Whites represented a larger proportion of MSM living with both HIV and stage 3 (AIDS) compared to blacks/African Americans and Hispanics. Of the newly diagnosed cases among MSM, 21% progressed to stage 3 (AIDS) by the end of 2016.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM, with those who identify as non-white tending to be younger (Table 7). Among white MSM living with HIV disease, the majority (62%) were between 45 and 64 years of age at the end of 2016. However, only 42% of living black/African American MSM and 45% of living Hispanic MSM with HIV disease were in this age group. The greatest numbers of black/African American and Hispanic MSM living with HIV disease were between 25 and 44 years of age. Blacks/African Americans represented the largest number of MSM under the age of 25 (267).

Table 8. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by geographic area, by HIV care region, Missouri, 2016

Geographic Area	<u>White</u>		<u>Black/African American</u>		<u>Hispanic</u>		<u>Total*</u>	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	1,045	46.8%	1,098	49.2%	44	2.0%	2,232	28.3%
St. Louis County	572	39.8%	784	54.6%	57	4.0%	1,436	18.2%
Kansas City	1,084	51.7%	822	39.2%	141	6.7%	2,097	26.6%
Outstate	1,447	76.7%	308	16.3%	93	4.9%	1,887	24.0%
Missouri Correctional Facilities	73	32.4%	145	64.4%	7	3.1%	225	2.9%
MISSOURI TOTAL	4,221	53.6%	3,157	40.1%	342	4.3%	7,877	100.0%
<u>HIV Care Region</u>								
St. Louis	1,859	47.0%	1,920	48.5%	105	2.7%	3,958	50.2%
Kansas City	1,416	55.4%	900	35.2%	178	7.0%	2,556	32.4%
Northwest	57	80.3%	12	16.9%	2	2.8%	71	0.9%
Central	244	69.9%	87	24.9%	15	4.3%	349	4.4%
Southwest	457	83.7%	43	7.9%	32	5.9%	546	6.9%
Southeast	115	66.9%	50	29.1%	3	1.7%	172	2.2%
Missouri Correctional Facilities	73	32.4%	145	64.4%	7	3.1%	225	2.9%
MISSOURI TOTAL	4,221	53.6%	3,157	40.1%	342	4.3%	7,877	100.0%
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities. **Percentage of race/ethnicity in each area/region. ***Percentage of cases per area/region. Note: Percentages may not total 100% due to rounding.								

Of the 7,877 MSM living with HIV disease at the end of 2016, the largest proportion was diagnosed in St. Louis City (28%), followed by Kansas City (27%) (Table 8). There were differences in the proportion of living HIV disease cases among MSM diagnosed in each geographic area by race/ethnicity. In Outstate Missouri, 77% of persons living with HIV disease attributed to MSM were white, whereas only 32% of this group who were diagnosed in Missouri correctional facilities were white. The differences were likely due to variations in the general population of the geographic areas.

Similar patterns were also seen for the HIV care regions. The St. Louis HIV Care Region represented 50% of all living cases among MSM and the Kansas City HIV Region comprised 32%. The proportion of living cases among white MSM was highest in the Southwest HIV Care Region (84%) and lowest in Missouri correctional facilities (32%).

Table 9. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men and inject drugs, by selected race/ethnicity, Missouri, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	7	77.8%	164	68.0%	5	0.0%	229	62.1%
Black/African American	0	0.0%	64	26.6%	0	0.0%	119	32.2%
Hispanic	2	22.2%	8	3.3%	0	0.0%	13	3.5%
Other/Unknown	0	0.0%	5	2.1%	0	0.0%	8	2.2%
MISSOURI TOTAL ***	9	100.0%	241	100.0%	5	100.0%	369	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

***Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total 100% due to rounding.

Table 10. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, Missouri, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	4	1.0%	1	0.5%	1	4.8%	6	1.0%
25-44	126	32.1%	40	21.9%	9	42.9%	184	30.2%
45-64	243	61.8%	131	71.6%	11	52.4%	389	63.8%
65+	20	5.1%	11	6.0%	0	0.0%	31	5.1%
MISSOURI TOTAL	393	100.0%	183	100.0%	21	100.0%	610	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

A total of 14 new HIV disease diagnoses were attributed to men who have sex with men and inject drugs (MSM/IDU) in 2016 (Table 9). The small number of new cases diagnosed among MSM/IDU makes patterns by race/ethnicity and sex difficult to interpret. Five newly diagnosed cases progressed to stage 3 (AIDS) by the end of 2016. Whites represented the majority (78%) of new HIV cases among MSM/IDU. Among living HIV and stage 3 (AIDS) cases, whites represented the largest proportion of cases (68% and 62%, respectively).

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM/IDU (Table 10). Among white and black/African American MSM/IDU living with HIV disease, the majority (62% and 72%, respectively) were between 45 and 64 years of age at the end of 2016. Comparatively, only 52% of Hispanic MSM/IDU living with HIV disease were between 45 and 64 years of age.

Table 11. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by geographic area, by HIV care region, Missouri, 2016

Geographic Area	<u>White</u>		<u>Black/African American</u>		<u>Hispanic</u>		<u>Total*</u>	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	46	41.1%	61	54.5%	3	2.7%	112	18.4%
St. Louis County	25	49.0%	26	51.0%	0	0.0%	51	8.4%
Kansas City	94	63.5%	38	25.7%	9	6.1%	148	24.3%
Outstate	193	81.4%	33	13.9%	8	3.4%	237	38.9%
Missouri Correctional Facilities	35	56.5%	25	40.3%	1	1.6%	62	10.2%
MISSOURI TOTAL	393	64.4%	183	30.0%	21	3.4%	610	100.0%
<u>HIV Care Region</u>								
St. Louis	84	47.5%	87	49.2%	4	2.3%	177	29.0%
Kansas City	135	69.9%	41	21.2%	9	4.7%	193	31.6%
Northwest	10	71.4%	4	28.6%	0	0.0%	14	2.3%
Central	34	65.4%	16	30.8%	2	3.8%	52	8.5%
Southwest	76	87.4%	4	4.6%	5	5.7%	87	14.3%
Southeast	19	76.0%	6	24.0%	0	0.0%	25	4.1%
Missouri Correctional Facilities	35	56.5%	25	40.3%	1	1.6%	62	10.2%
MISSOURI TOTAL	393	64.4%	183	30.0%	21	3.4%	610	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities.

**Percentage of race/ethnicity in each area/region.

***Percentage of cases per area/region.

Note: Percentages may not total 100% due to rounding.

Of the 610 MSM/IDU living with HIV disease at the end of 2016, the largest proportion was diagnosed in Outstate Missouri (39%), followed by Kansas City (24%) (Table 11). There were differences in the proportion of living HIV disease cases among MSM/IDU diagnosed in each geographic area by race/ethnicity. In Outstate Missouri, 81% of living cases attributed to MSM/IDU were white, whereas only 41% of living cases diagnosed in St. Louis City among MSM/IDU were white.

The Kansas City HIV Care Region represented 32% of all living cases among MSM/IDU, and the St. Louis HIV Care Region comprised 29%. The proportion of living cases among white MSM/IDU was highest in the Southwest HIV Care Region (87%) and lowest in the St. Louis HIV Care Region (48%).

Table 12. Newly diagnosed and living HIV and stage 3 (AIDS) cases in injection drug users, by selected race/ethnicity and sex, Missouri, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	5	35.7%	87	32.2%	2	40.0%	106	25.6%
Black/African American Male	2	14.3%	75	27.8%	1	20.0%	136	32.9%
Hispanic Male	0	0.0%	7	2.6%	0	0.0%	18	4.3%
White Female	5	35.7%	60	22.2%	1	20.0%	64	15.5%
Black/African American Female	2	14.3%	35	13.0%	1	20.0%	75	18.1%
Hispanic Female	0	0.0%	3	1.1%	0	0.0%	9	2.2%
MISSOURI TOTAL***	14	100.0%	270	100.0%	5	100.0%	414	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

***Totals include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total 100% due to rounding.

Table 13. Living HIV disease cases in injection drug users, by selected race/ethnicity and sex and current age group, Missouri, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	0.5%	3	1.4%	1	0.8%	0	0.0%	6	0.9%
25-44	38	19.7%	35	16.6%	46	37.1%	27	24.5%	159	23.2%
45-64	144	74.6%	147	69.7%	76	61.3%	78	70.9%	471	68.9%
65+	10	5.2%	26	12.3%	1	0.8%	5	4.5%	48	7.0%
MISSOURI TOTAL	193	100.0%	211	100.0%	124	100.0%	110	100.0%	684	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

A total of 19 new HIV disease diagnoses were attributed to injection drug use (IDU) in 2016 (Table 12). The small number of new cases diagnosed among IDU make patterns by race/ethnicity and sex difficult to interpret. Of the newly diagnosed cases among IDU, 26% progressed to stage 3 (AIDS) by the end of 2016. Males represented approximately 63% of all living HIV disease cases among IDU.

Among IDU living with HIV disease, a smaller proportion of white males and white females had progressed to stage 3 (AIDS) by the end of 2016 compared to non-white males and females. There were differences in the distribution of living cases by race/ethnicity and sex among IDU between those classified as HIV cases compared to those classified as stage 3 (AIDS) cases. For example, white males represented the largest proportion of living HIV cases (36%) while black/African American males represented the largest proportion (33%) of living stage 3 (AIDS) cases among IDU.

The greatest numbers of persons living with HIV disease in each race/ethnicity and sex category presented among IDU were 45 to 64 years of age at the end of 2016 (Table 13). The age group of 25 to 44 represented the second highest number of cases. The proportion of living HIV disease cases between the ages of 25 and 44 was greatest among white females.

Table 14. Living HIV disease cases in injection drug users, by selected race/ethnicity, by geographic area, by HIV care region, Missouri, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	24	17.1%	111	79.3%	3	2.1%	140	20.5%
St. Louis County	20	35.7%	34	60.7%	1	1.8%	56	8.2%
Kansas City	44	30.1%	86	58.9%	13	8.9%	146	21.3%
Outstate	193	72.6%	54	20.3%	17	6.4%	266	38.9%
Missouri Correctional Facilities	36	47.4%	36	47.4%	3	3.9%	76	11.1%
MISSOURI TOTAL	317	46.3%	321	46.9%	37	5.4%	684	100.0%
HIV Care Region								
St. Louis	74	32.6%	146	64.3%	4	1.8%	227	33.2%
Kansas City	79	42.2%	89	47.6%	16	8.6%	187	27.3%
Northwest	9	64.3%	3	21.4%	1	7.1%	14	2.0%
Central	36	66.7%	15	27.8%	3	5.6%	54	7.9%
Southwest	66	70.2%	18	19.1%	9	9.6%	94	13.7%
Southeast	17	53.1%	14	43.8%	1	3.1%	32	4.7%
Missouri Correctional Facilities	36	47.4%	36	47.4%	3	3.9%	76	11.1%
MISSOURI TOTAL	317	46.3%	321	46.9%	37	5.4%	684	100.0%
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities. **Percentage of race/ethnicity in each area/region. ***Percentage of cases per area/region. Note: Percentages may not total 100% due to rounding.								

Of the 684 IDU living with HIV disease at the end of 2016, the largest proportion was diagnosed in Outstate Missouri (39%), followed by Kansas City (21%) (Table 14). There were differences in the proportion of living HIV disease cases among IDU diagnosed in each geographic area by race/ethnicity. In Outstate Missouri, 73% of living cases attributed to IDU were white, whereas only 17% of living cases diagnosed in St. Louis City among IDU were white. The differences are likely due to variations in the general population of the geographic areas.

The St. Louis HIV Care Region represented 33% of all living cases among IDU, and the Kansas City HIV Care Region comprised 27%. The proportion of living cases among white IDU was highest in the Southwest HIV Care Region (70%) and lowest in the St. Louis HIV Care Region (33%), while the reverse was true of black/African American living cases among IDU (19% and 64%). Though proportions of Hispanic living cases among IDU by HIV care region are difficult to interpret due to small numbers of individuals in this population, the highest number of these cases was in the Kansas City HIV Care Region (16).

Table 15. Newly diagnosed and living HIV and stage 3 (AIDS) cases in heterosexual contacts, by selected race/ethnicity and sex, Missouri, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	2	3.2%	57	6.4%	2	9.1%	59	6.4%
Black/African American Male	10	16.1%	133	15.0%	2	9.1%	183	19.7%
Hispanic Male	0	0.0%	6	0.7%	0	0.0%	12	1.3%
White Female	15	24.2%	233	26.2%	6	27.3%	203	21.9%
Black/African American Female	30	48.4%	412	46.4%	11	50.0%	428	46.1%
Hispanic Female	2	3.2%	25	2.8%	1	4.5%	25	2.7%
MISSOURI TOTAL ***	62	100.0%	888	100.0%	22	100.0%	929	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

***Total includes cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total 100% due to rounding.

Table 16. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, Missouri, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	5	0.6%	6	0.3%
19-24	0	0.0%	8	2.5%	7	1.6%	38	4.5%	56	3.1%
25-44	20	17.2%	117	37.0%	150	34.4%	369	43.9%	708	39.0%
45-64	74	63.8%	168	53.2%	242	55.5%	397	47.3%	927	51.0%
65+	22	19.0%	23	7.3%	37	8.5%	31	3.7%	120	6.6%
MISSOURI TOTAL	116	100.0%	316	100.0%	436	100.0%	840	100.0%	1,817	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

A total of 84 new HIV disease diagnoses were attributed to heterosexual contact in 2016 (Table 15). Black/African American females represented the largest number of new HIV disease diagnoses among heterosexuals. They were also more likely to have progressed to stage 3 (AIDS) by the end of 2016 than white females (50% compared to 27%). Overall, 26% of newly diagnosed cases attributed to heterosexual contact progressed to stage 3 (AIDS) by the end of 2016. Females represented 75% of living HIV cases and 82% of living stage 3 (AIDS) cases among heterosexual contact cases.

Among heterosexual contact cases, the greatest proportion of living cases was among adults aged 45 to 64 years of age in all race and sex categories presented (Table 16). This age group comprised just over half (51%) of total cases.

Table 17. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, by HIV care region, Missouri, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	71	13.2%	443	82.2%	15	2.8%	539	29.7%
St. Louis County	80	19.2%	316	75.8%	13	3.1%	417	22.9%
Kansas City	57	21.3%	190	71.2%	14	5.2%	267	14.7%
Outstate	330	62.3%	158	29.8%	25	4.7%	530	29.2%
Missouri Correctional Facilities	14	21.9%	49	76.6%	1	1.6%	64	3.5%
MISSOURI TOTAL	552	30.4%	1,156	63.6%	68	3.7%	1,817	100.0%
HIV Care Region								
St. Louis	199	19.5%	772	75.5%	30	2.9%	1,022	56.2%
Kansas City	102	30.2%	203	60.1%	23	6.8%	338	18.6%
Northwest	14	56.0%	11	44.0%	0	0.0%	25	1.4%
Central	78	60.0%	45	34.6%	3	2.3%	130	7.2%
Southwest	94	66.7%	33	23.4%	9	6.4%	141	7.8%
Southeast	51	52.6%	43	44.3%	2	2.1%	97	5.3%
Missouri Correctional Facilities	14	21.9%	49	76.6%	1	1.6%	64	3.5%
MISSOURI TOTAL	552	30.4%	1,156	63.6%	68	3.7%	1,817	100.0%
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities. **Percentage of race in each area/region. ***Percentage of cases per area/region. Note: Percentages may not total 100% due to rounding.								

Of the 1,817 living cases among heterosexual contacts at the end of 2016, the largest proportion was diagnosed in St. Louis City (30%), and the next highest was Outstate Missouri (29%) (Table 17). There were differences in the proportion of living HIV disease cases among heterosexuals diagnosed in each geographic area by race/ethnicity. In Outstate, 62% of living cases attributed to heterosexual contact were white, whereas only 13% of living cases diagnosed in St. Louis City among heterosexual contact cases were white. The differences are likely due to variations in the general population of the geographic areas. Blacks/African Americans represented a larger proportion of living HIV disease cases among heterosexual contact cases (64%) compared to whites and Hispanics.

The St. Louis HIV Care Region represented 56% of all living cases among heterosexuals, and the Kansas City HIV Care Region comprised 19%. The proportion of white living cases among heterosexuals was highest in the Southwest HIV Care Region (67%) and lowest in the St. Louis HIV Care Region (20%). The proportion of black/African American living cases was highest in Missouri correctional facilities (77%) and lowest in the Southwest HIV Care Region (23%).

Table 18. Deaths* among HIV cases, by selected race and sex and mode of transmission, Missouri, 1982-2016

Mode of Transmission	<u>White Males</u>		<u>Black/African American Males</u>		<u>White Females</u>		<u>Black/African American Females</u>		<u>Total**</u>	
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
MSM	246	64.1%	162	55.7%	0	0.0%	0	0.0%	427	51.4%
MSM/IDU	45	11.7%	18	6.2%	0	0.0%	0	0.0%	68	8.2%
IDU	35	9.1%	40	13.7%	9	22.0%	19	27.9%	110	13.2%
Heterosexual Contact	10	2.6%	26	8.9%	22	53.7%	34	50.0%	95	11.4%
No Indicated Risk (NIR)	41	10.7%	44	15.1%	10	24.4%	14	20.6%	122	14.7%
MISSOURI TOTAL ***	384	100.0%	291	100.0%	41	100.0%	68	100.0%	831	100.0%

*May or may not be due to HIV-related illnesses.

**Totals include cases in persons whose race/ethnicity is either unknown or not listed.

***Total numbers and percentages include 9 cases (1.1%) with a mode of transmission not indicated on the table, such as hemophilia/coagulation disorder, blood transfusion or tissue recipient, etc. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total 100% due to rounding.

Table 19. Deaths* among stage 3 (AIDS) cases, by selected race and sex and mode of transmission, Missouri, 1982-2016

Mode of Transmission	<u>White Males</u>		<u>Black/African American Males</u>		<u>White Females</u>		<u>Black/African American Females</u>		<u>Total**</u>	
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
MSM	3,396	77.5%	1,347	67.2%	0	0.0%	0	0.0%	4,956	66.3%
MSM/IDU	450	10.3%	216	10.8%	0	0.0%	0	0.0%	693	9.3%
IDU	188	4.3%	202	10.1%	81	27.2%	110	24.8%	630	8.4%
Heterosexual Contact	67	1.5%	99	4.9%	157	52.7%	267	60.3%	612	8.2%
No Indicated Risk (NIR)	125	2.9%	118	5.9%	32	10.7%	43	9.7%	346	4.6%
MISSOURI TOTAL ***	4,382	100.0%	2,004	100.0%	298	100.0%	443	100.0%	7,476	100.0%

*May or may not be due to stage 3 (AIDS)-related illnesses.

**Totals include cases in persons whose race/ethnicity is either unknown or not listed.

***Total numbers and percentages include 239 cases (3.2%) with a mode of transmission not indicated on the table, such as hemophilia/coagulation disorder, blood transfusion or tissue recipient, etc. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total 100% due to rounding.

The number of deaths that have occurred among persons still classified as HIV cases at the time of death was small (831) in comparison to the number of deaths among persons classified as stage 3 (AIDS) (7,476) (Tables 18 and 19). The greatest proportion of deaths among HIV cases has occurred among white males (46%) (Table 18).

There were differences in the distribution of deaths among HIV cases by mode of transmission among the race/ethnicity and sex categories. Among males, the majority of deaths occurred among cases attributed to MSM. Among female HIV cases, the largest number of deaths occurred among cases attributed to heterosexual contact. Similar patterns were observed for deaths among stage 3 (AIDS) cases (Table 19). The proportion of deaths among stage 3 (AIDS) cases with no indicated risk was smaller than that among HIV cases, likely because there was more time to obtain exposure category information.

Table 20. Newly diagnosed and living HIV and stage 3 (AIDS) cases with exposure category assignments, Missouri, 2016

Exposure Category	HIV Cases				Stage 3 (AIDS) Cases			
	2016*		Living		2016**		Living	
Adult/Adolescent								
MSM	286	73.7%	4,320	71.0%	79	64.8%	4,336	67.6%
MSM/IDU	10	2.6%	265	4.4%	6	4.9%	400	6.2%
IDU	16	4.1%	319	5.2%	6	4.9%	480	7.5%
Heterosexual Contact	75	19.3%	1,164	19.1%	31	25.4%	1,156	18.0%
Hemophilia/Coagulation Disorder	0	0.0%	8	0.1%	0	0.0%	32	0.5%
Blood Transfusion or Tissue Recipient	0	0.0%	2	0.0%	0	0.0%	7	0.1%
No Indicated Risk (NIR)	-----	-----	-----	-----	-----	-----	-----	-----
ADULT/ADOLESCENT SUBTOTAL	388	† 100.0%	6,081	† 100.0%	122	100.0%	6,412	† 100.0%
Pediatric (<13 years old)								
PEDIATRIC SUBTOTAL	5	100.0%	76	100.0%	2	100.0%	37	100.0%
TOTAL	393		6,157		124		6,449	

*HIV cases reported during 2016 which remained HIV cases at the end of the year.
 **Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.
 †Includes one case with a confirmed "other" exposure category among persons newly diagnosed with HIV, three cases among persons living with HIV, and one case among persons living with stage 3 (AIDS).
 Note: Percentages may not total 100% due to rounding.

The data in Table 20 have been adjusted to proportionately redistribute individuals with no indicated risk factor to known exposure categories based on sex and race/ethnicity. These data do not reflect the true counts of persons reported in each exposure category. Among both new and living HIV and stage 3 (AIDS) cases, MSM represented the greatest proportion of cases. Five new HIV cases and two new stage 3 (AIDS) cases were diagnosed among children less than 13 years of age in 2016.

The majority of HIV disease cases diagnosed in 2016 (89%) and those living with HIV disease (92%) were residents of a metropolitan area at the time of diagnosis (Table 21). For a list of counties classified as a metropolitan area, please refer to the Appendix. There were differences in the proportion of living HIV disease cases by sex based on the population of the area of residence. The proportion of males living with HIV disease was lower in less populated areas than in metropolitan areas. Whereas 83% of living HIV disease cases in metropolitan areas occurred among males, only 71% of living cases in nonmetropolitan areas were among males. There were differences in the distribution of living HIV disease cases by race/ethnicity based on the population of the area of residence. As the population of the area of residence decreased, the proportion of living cases that occurred among whites increased. Only 46% of living HIV disease diagnoses were among whites in metropolitan areas compared to 75% in nonmetropolitan areas. There were also differences based on the population of the area of residence in the distribution of new and living HIV disease cases by exposure category. As the population of the area of residence decreased, the proportion of new and living cases attributed to MSM generally decreased. Among those living with HIV disease, the proportion of cases diagnosed between 45 and 64 years of age generally increased as the population of the area of residence decreased.

Table 21. Newly diagnosed and living HIV disease* cases, by population of area of residence at time of diagnosis, by sex, by race/ethnicity, by exposure category, and by age at diagnosis, Missouri, 2016†

	Newly Diagnosed						Living					
	Metropolitan Area**			Micropolitan Area***			Nonmetropolitan Area****			Metropolitan Area**		
	Cases	%		Cases	%		Cases	%		Cases	%	
Sex												
Male	370	82.2%	25	69.4%	14	73.7%	9,304	83.1%	379	74.3%	290	71.4%
Female	80	17.8%	11	30.6%	5	26.3%	1,887	16.9%	131	25.7%	116	28.6%
Total	450	100.0%	36	100.0%	19	100.0%	11,191	100.0%	510	100.0%	406	100.0%
Race/Ethnicity												
White	162	36.0%	24	66.7%	19	100.0%	5,194	46.4%	348	68.2%	303	74.6%
Black/African American	243	54.0%	5	13.9%	0	0.0%	5,246	46.9%	130	25.5%	83	20.4%
Hispanic	33	7.3%	4	11.1%	0	0.0%	511	4.6%	21	4.1%	16	3.9%
Other/Unknown	12	2.7%	3	8.3%	0	0.0%	240	2.1%	11	2.2%	4	1.0%
Total	450	100.0%	36	100.0%	19	100.0%	11,191	100.0%	510	100.0%	406	100.0%
Exposure Category												
MSM	296	65.8%	16	44.4%	6	31.6%	7,238	64.7%	234	45.9%	180	44.3%
MSM/IDU	8	1.8%	3	8.3%	1	5.3%	489	4.4%	38	7.5%	21	5.2%
IDU	12	2.7%	2	5.6%	2	10.5%	531	4.7%	40	7.8%	37	9.1%
Heterosexual Contact	69	15.3%	8	22.2%	5	26.3%	1,541	13.8%	113	22.2%	99	24.4%
No Indicated Risk (NIR)	60	13.3%	5	13.9%	4	21.1%	1,257	11.2%	72	14.1%	56	13.8%
Other	0	0.0%	1	2.8%	0	0.0%	44	0.4%	3	0.6%	3	0.7%
Pediatric	5	1.1%	1	2.8%	1	5.3%	91	0.8%	10	2.0%	10	2.5%
Total	450	100.0%	36	100.0%	19	100.0%	11,191	100.0%	510	100.0%	406	100.0%
Age at Diagnosis												
<2	0	0.0%	0	0.0%	1	5.3%	45	0.4%	4	0.8%	5	1.2%
2-12	5	1.1%	1	2.8%	0	0.0%	34	0.3%	5	1.0%	3	0.7%
13-18	18	4.0%	3	8.3%	1	5.3%	301	2.7%	11	2.2%	13	3.2%
19-24	117	26.0%	8	22.2%	2	10.5%	1,807	16.1%	72	14.1%	37	9.1%
25-44	201	44.7%	18	50.0%	8	42.1%	7,115	63.6%	324	63.5%	229	56.4%
45-64	105	23.3%	6	16.7%	6	31.6%	1,823	16.3%	91	17.8%	115	28.3%
65+	4	0.9%	0	0.0%	1	5.3%	66	0.6%	3	0.6%	4	1.0%
Total	450	100.0%	36	100.0%	19	100.0%	11,191	100.0%	510	100.0%	406	100.0%

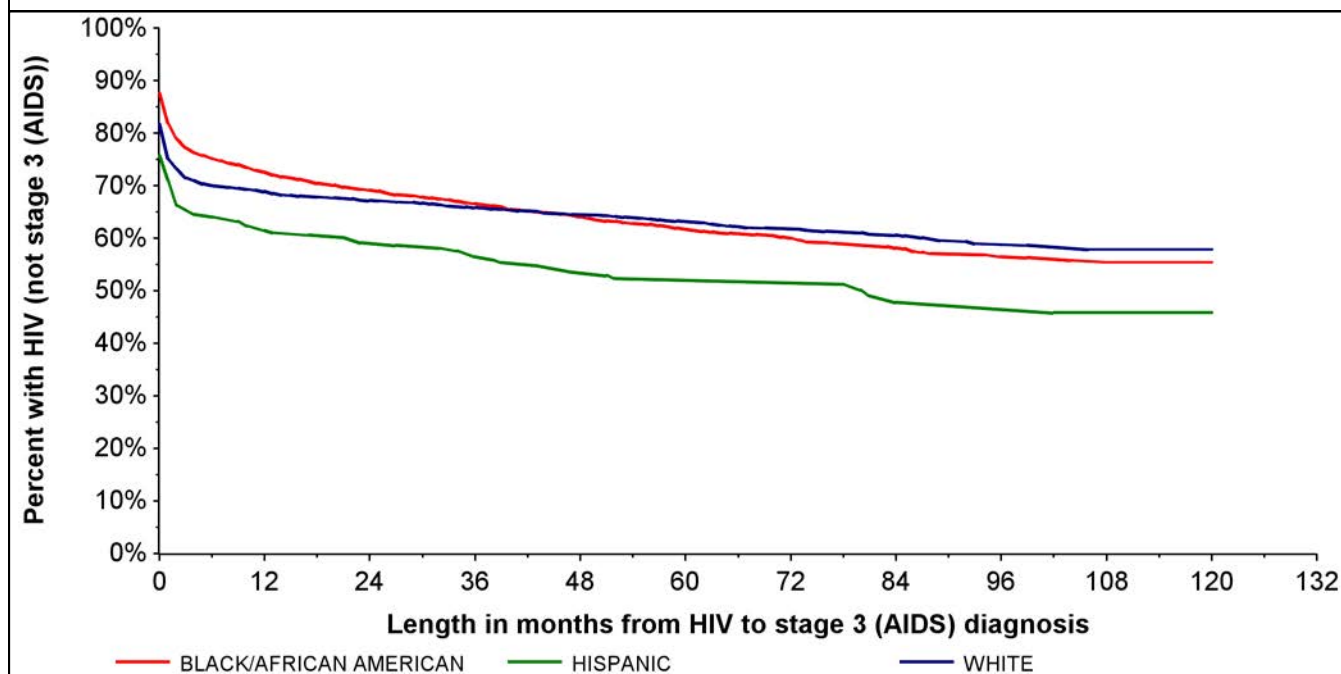
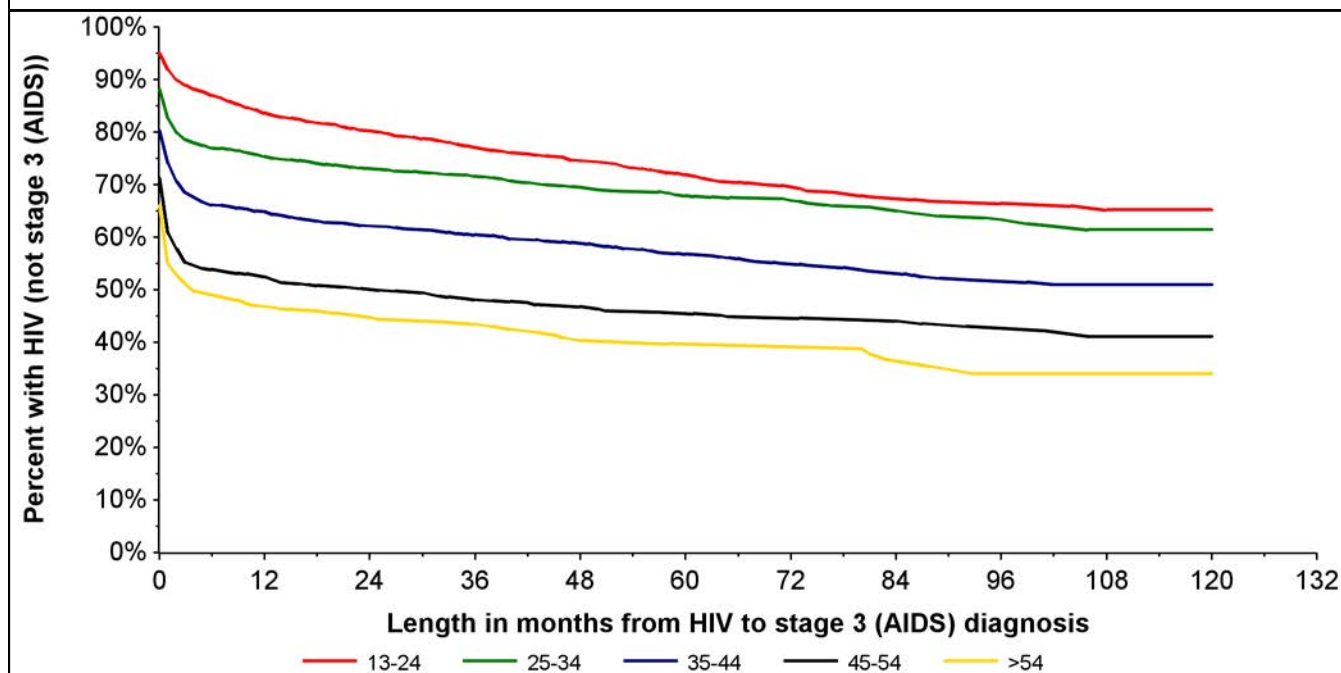
*Includes all individuals diagnosed with the HIV virus, regardless of current status (i.e., HIV or stage 3 (AIDS)).

†Does not include persons diagnosed in Missouri correctional facilities.

**A metropolitan area contains a core urban area with a population of at least 50,000. It also includes adjacent counties that have a high degree of social and economic integration with the urban area. Based on 2013 US Census estimates. See Appendix for map of included counties.

***A micropolitan area contains a core urban area with a population between 10,000-49,999. It also includes adjacent counties that have a high degree of social and economic integration with the core urban area. Based on 2013 US Census estimates. See Appendix for map of included counties.

****An area that does not meet the population requirements for the metropolitan or micropolitan area. Based on 2013 US Census estimates. See Appendix for map of included counties. Note: Percentages may not total 100% due to rounding.

Figure 10. Length of time between HIV and stage 3 (AIDS) diagnosis, by race/ethnicity, Missouri, 2007-2015**Figure 11. Length of time between HIV and stage 3 (AIDS) diagnosis, by age at diagnosis*, Missouri, 2007-2015**

*Age at earliest diagnosis of HIV disease, regardless of disease progression.

A greater proportion of Hispanics progressed from HIV to stage 3 (AIDS) within 12 months of their HIV diagnosis compared to whites and blacks/African Americans (Figure 10). It is important to note that for all curves displayed, data in the later months should be interpreted with caution as they are based on small numbers.

Younger age was associated with slower progression from HIV to stage 3 (AIDS). The proportion of individuals progressing to stage 3 (AIDS) increased as age at diagnosis increased (Figure 11). Over time, the proportion of cases that progressed to stage 3 (AIDS) remained higher as the age at initial HIV diagnosis increased.

Figure 12. Length of time between HIV and stage 3 (AIDS) diagnosis, by mode of transmission, Missouri, 2007-2015

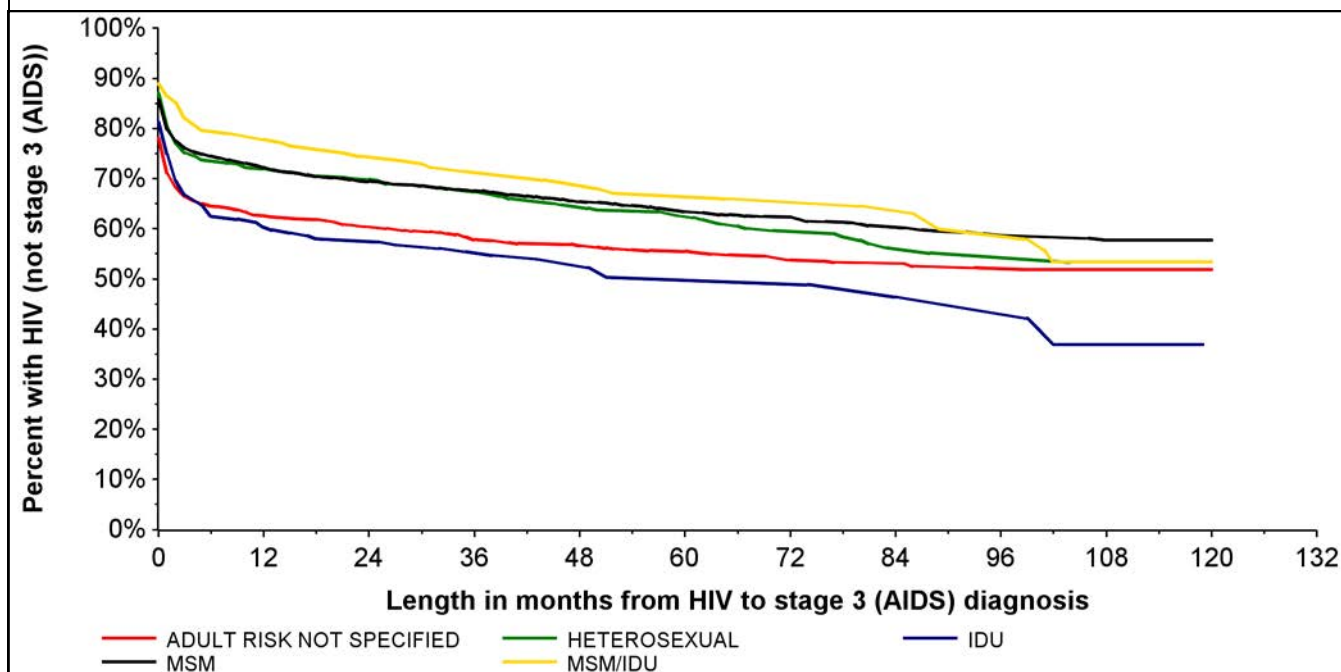
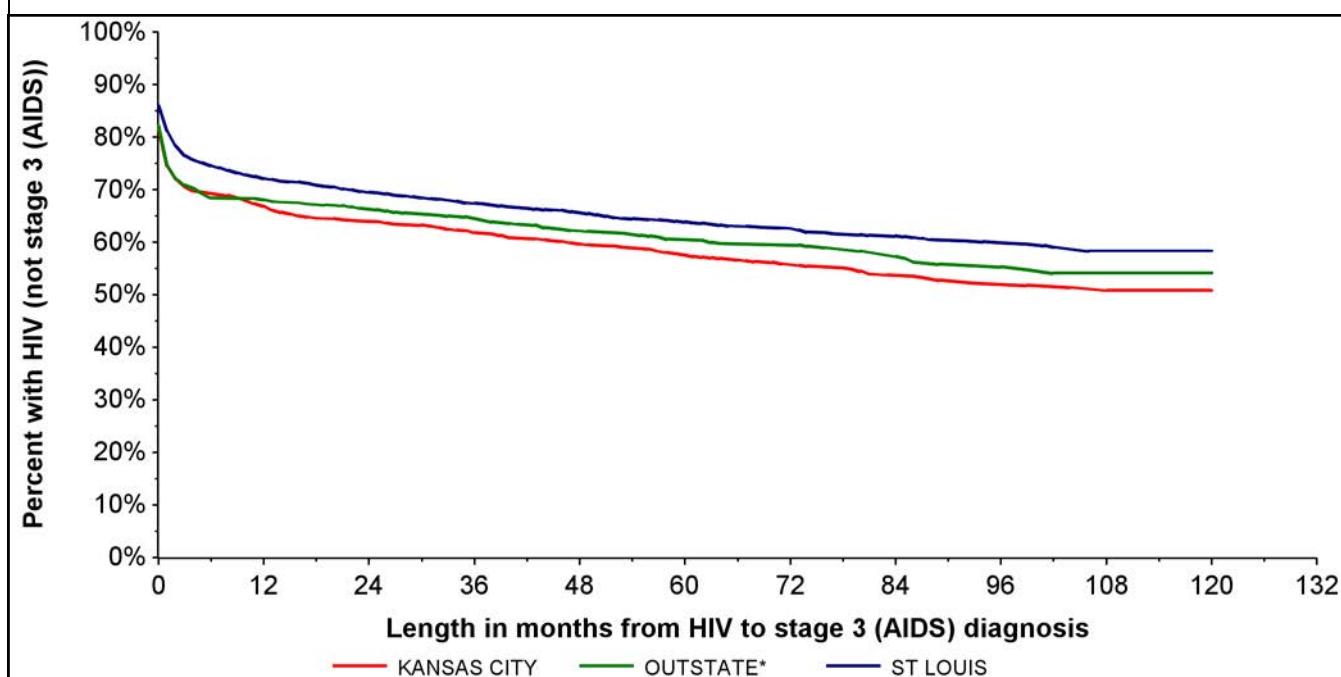


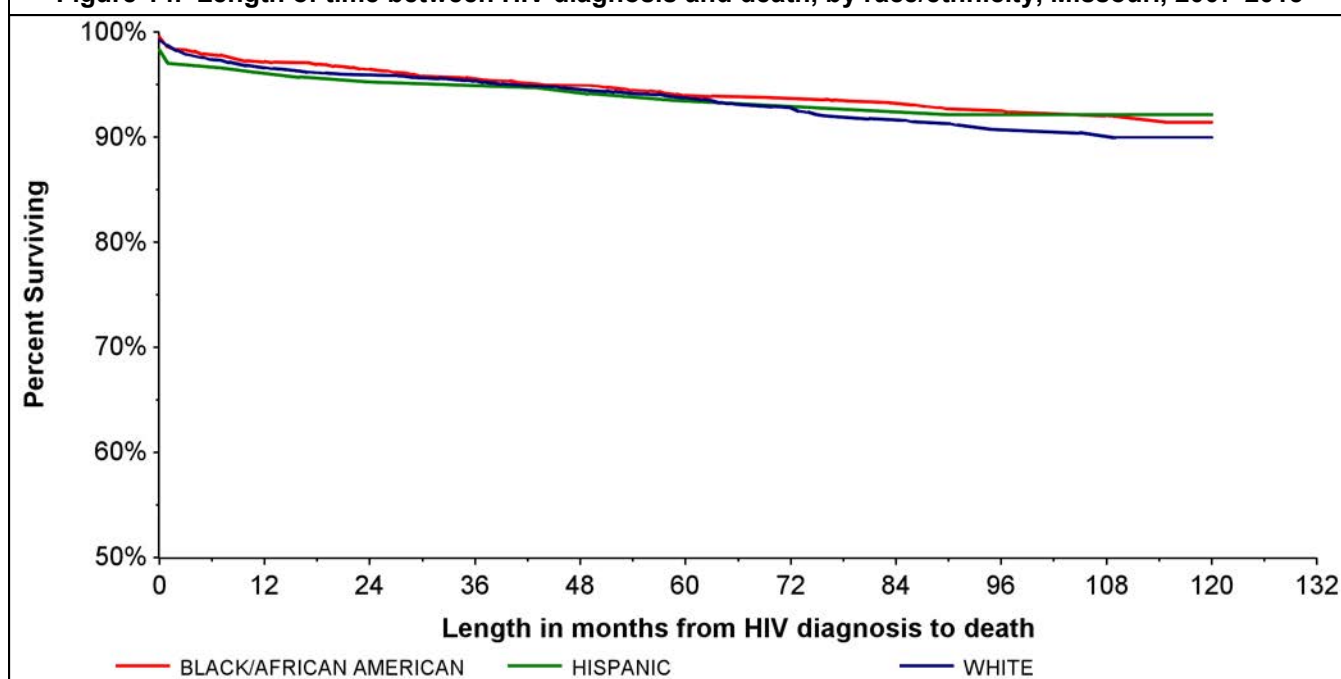
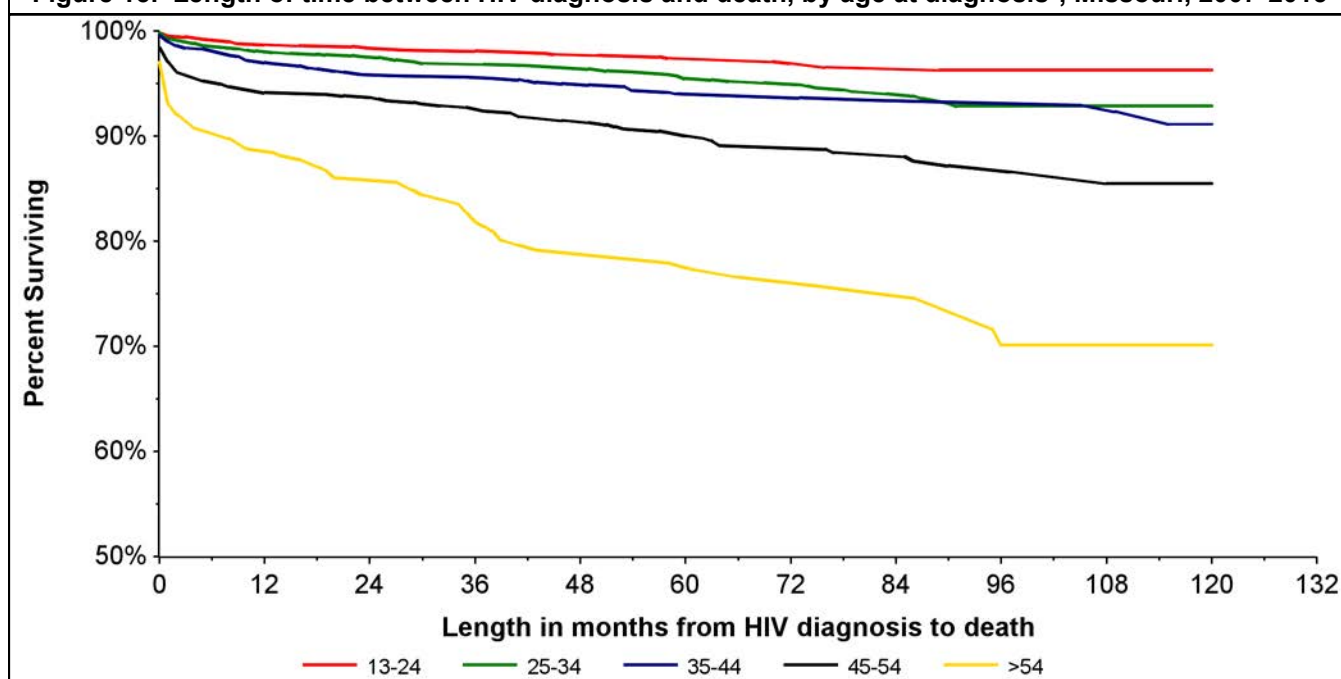
Figure 13. Length of time between HIV and stage 3 (AIDS) diagnosis, by HIV care region*, Missouri, 2007-2015



*Outstate includes the Central, Northwest, Southeast, and Southwest HIV Care Regions

A greater proportion of IDU progressed from HIV to stage 3 (AIDS) within 12 months of their HIV diagnosis compared to individuals from all other exposure categories (Figure 12). At 96 months after the initial HIV diagnosis, the proportion of cases that progressed to stage 3 (AIDS) remained higher for IDU compared with other exposure categories.

There were differences in the progression from HIV to stage 3 (AIDS) by HIV care region (Figure 13). The proportion of individuals that progressed to stage 3 (AIDS) over time was generally greater for the Kansas City HIV Care Region and all Outstate HIV Care Regions combined compared to the St. Louis HIV Care Region. Differences observed among the regions may be attributed in part to differences in the routine monitoring and reporting of CD4 counts and other active surveillance techniques.

Figure 14. Length of time between HIV diagnosis and death, by race/ethnicity, Missouri, 2007-2015**Figure 15. Length of time between HIV diagnosis and death, by age at diagnosis*, Missouri, 2007-2015**

*Age at earliest diagnosis of HIV disease, regardless of disease progression.

The length of time between the initial HIV diagnosis and reported death was similar by race/ethnicity (Figure 14). Five years following the initial HIV diagnosis, 93% of all individuals were still living.

Over time, the proportion of cases that were deceased was higher as the age at initial HIV diagnosis increased (Figure 15). For example, 72 months following the initial diagnosis, nearly 98% of individuals diagnosed between 13 and 24 years of age were still living, compared to only 76% of individuals diagnosed at greater than 54 years of age.

Figure 16. Length of time between HIV diagnosis and death, by mode of transmission, Missouri, 2007-2015

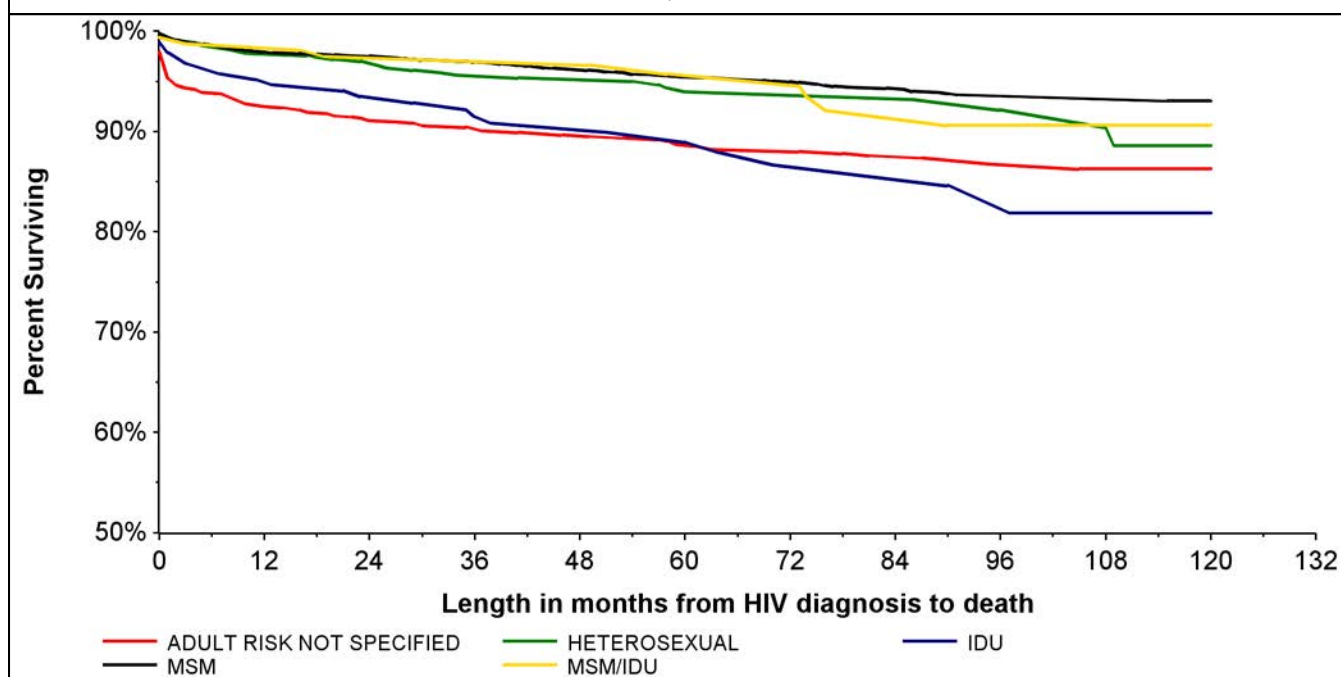
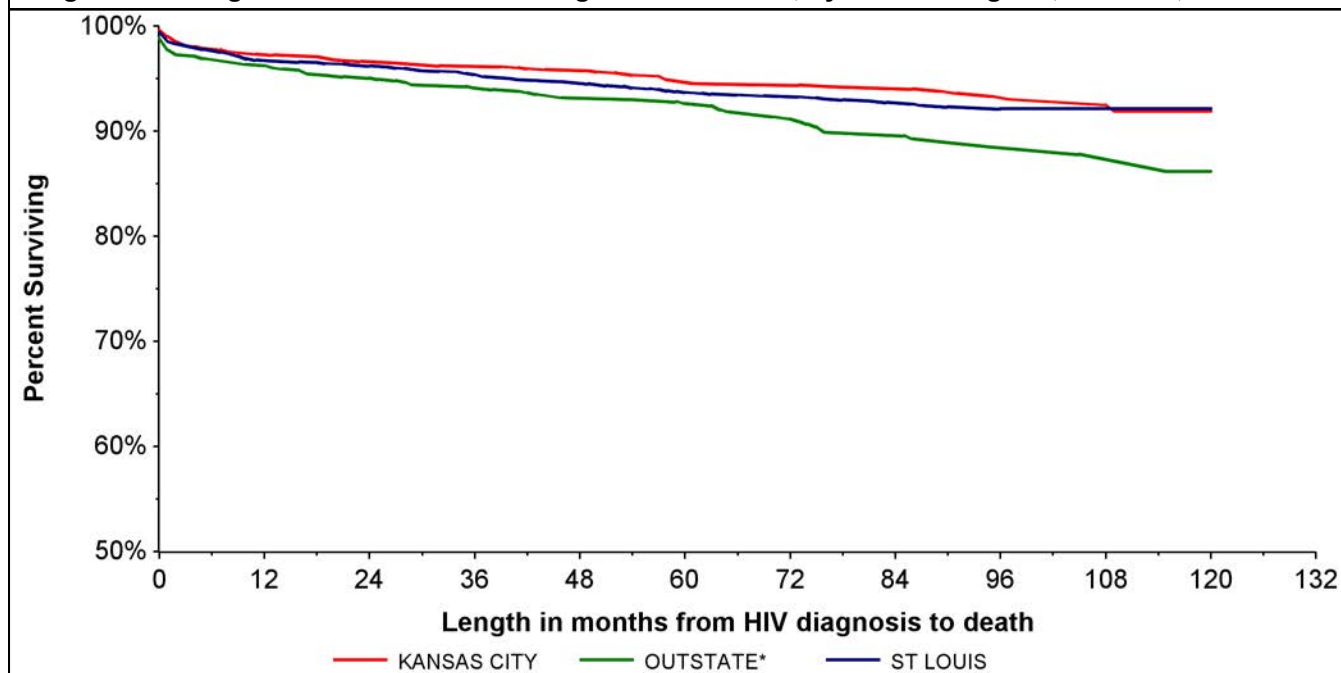


Figure 17. Length of time between HIV diagnosis and death, by HIV care region*, Missouri, 2007-2015



*Outstate includes the Central, Northwest, Southeast, and Southwest HIV care regions

A greater proportion of IDU and those with no reported risk were deceased within 36 months of their HIV diagnosis compared to individuals from all other exposure categories (Figure 16). Differences in survival persisted over time.

There were not significant differences in survival following HIV diagnosis by HIV care region (Figure 17). At 24 months following the initial HIV diagnosis, the proportion still living was 97% for the Kansas City HIV Care Region and the St. Louis HIV Care Region, and 95% for the Outstate HIV Care Regions combined.

Table 22. Initial CD4 and viral load values[†] among adults and adolescents newly diagnosed with HIV disease, Missouri, 2014-2015

Viral Load (copies/mL)	CD4 Count (cells/μL)											
	No Test		<200		200-350		351-500		>500		Total	
	N	%*	N	%*	N	%*	N	%*	N	%*	N	%**
No Test	75	8.0%	7	0.7%	1	0.1%	12	1.3%	24	2.6%	119	12.7%
0-10,000	21	2.2%	12	1.3%	27	2.9%	49	5.2%	113	12.1%	222	23.7%
10,001-100,000	36	3.8%	73	7.8%	82	8.8%	72	7.7%	89	9.5%	352	37.6%
>100,000	9	1.0%	131	14.0%	33	3.5%	41	4.4%	29	3.1%	243	26.0%
Total	141	15.1%	223	23.8%	143	15.3%	174	18.6%	255	27.2%	936	100.0%

[†]Within 12 months of the initial HIV diagnosis

*% of table total

**% of column total

Of persons newly diagnosed with HIV disease between 2014 and 2015, 8% did not have a CD4 or a viral load laboratory result reported to DHSS within 12 months of diagnosis (Table 22). Nearly 24% of persons diagnosed between 2014 and 2015 had an initial CD4 count of less than 200 cells/μL. This indicates that a sizable proportion of individuals were being diagnosed at a later stage of disease progression and likely were unaware of their infection for at least several years. This suggests greater emphasis is needed to establish routine HIV testing, so individuals are diagnosed within a shorter time period after becoming infected.

Table 23. Percent of adults and adolescents receiving at least one CD4 within 12 months of their HIV diagnosis and the median initial CD4 count, Missouri, 2014-2015

	Number	% with CD4 within 12 months of HIV diagnosis	Median of initial CD4 counts (cells/ μL)
HIV Status			
HIV (not stage 3 (AIDS))	685	80.4%	473
Concurrent HIV and stage 3 (AIDS) diagnosis	192	99.5%	46
Stage 3 (AIDS) >1 month after HIV diagnosis	59	89.8%	182
Sex			
Male	786	84.9%	384
Female	150	85.3%	322
Race/Ethnicity			
White	393	87.8%	381
Black/African American	462	81.8%	381
Hispanic	41	87.8%	315
Other/Unknown	40	90.0%	334
Exposure Category			
MSM	610	86.4%	399
MSM/IDU	31	93.5%	466
IDU	39	87.2%	262
HRH	156	80.8%	315
Other	0	--	--
NIR	100	79.0%	236
Age at HIV Diagnosis			
13-18	30	70.0%	513
19-24	248	86.7%	450
25-44	467	84.4%	387
45-64	176	86.9%	167
65+	15	80.0%	134

The percent of adults and adolescents receiving at least one CD4 within 12 months of their HIV diagnosis and the median initial CD4 count varied by race/ethnicity, exposure category, and age at HIV diagnosis (Table 23). There was no significant difference in the percent of females (85%) compared to males (85%) with at least one CD4 within 12 months of initial diagnosis. The initial median CD4 count tended to be greater for males (384 cells/ μ L) compared to females (322 cells/ μ L). A greater proportion of Hispanics and whites tended to have a CD4 count within 12 months of diagnosis compared to blacks/African Americans, with Hispanics and whites having an equal proportion (88%). Among those with a CD4 count within 12 months of diagnosis, the initial median CD4 count tended to be lower among Hispanics (315 cells/ μ L). Among exposure categories, MSM/IDU and IDU cases had a higher proportion of adults and adolescents receiving an initial CD4 within 12 months of diagnosis compared to persons with other known exposure categories. The initial median CD4 tended to be lowest among individuals with no identified risk compared to all other exposure categories. The median initial CD4 count tended to decrease as the age at HIV diagnosis increased. These data may be beneficial when determining groups that should be targeted for new testing initiatives to identify individuals earlier in their disease progression.

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Key Highlights: What are the indicators of HIV disease infection risk in Missouri?

Primary and Secondary (P&S) Syphilis

- The number of reported P&S syphilis cases increased from 2015 (307 cases) to 2016 (400 cases). Increases were seen in the St. Louis, Southeast, and Southwest HIV Care Regions.
- The rate of reported cases was highest in St. Louis City (27 per 100,000).
- Blacks/African Americans were disproportionately impacted, with a case rate 7.6 times as high as the rate among whites.

Early Latent Syphilis

- The number of early latent syphilis cases increased from 2015 (247 cases) to 2016 (276 cases). Increases were seen in all HIV care regions except for the Northwest HIV Care Region.
- The rate of reported cases was highest in St. Louis City (20 per 100,000).
- Males represented the majority (84%) of reported early latent syphilis cases.
- The case rate was 6.6 times as high among blacks/African Americans compared to whites.

Gonorrhea

- The number of reported gonorrhea cases increased from 2015 (8,942 cases) to 2016 (11,479 cases). Increases were seen in all HIV care regions except for the Central HIV Care Region.
- The rate of reported cases was highest in St. Louis City (750 per 100,000).
- A larger proportion of reported gonorrhea cases was diagnosed between 15 and 19 years of age among black/African American females (42%) compared to white females (16%), black/African American males (34%), and white males (8%).

Chlamydia

- The number of reported chlamydia cases increased from 2015 (28,948 cases) to 2016 (30,843 cases). Increases were seen in all HIV care regions.
- The rate of reported cases was highest in St. Louis City (1,279 per 100,000).
- A larger proportion of reported chlamydia cases was diagnosed between 15 and 19 years of age among white females (41%) compared to black/African American females (35%), black/African American males (16%) and white males (9%).

Hepatitis B

- The number of reported hepatitis B cases in Missouri decreased from 2015 (704 cases) to 2016 (562 cases).
- The rate of reported cases was highest in St. Louis City (27 per 100,000).
- Among females, the largest numbers of cases were 30 to 39 years of age, while among males the largest numbers of cases were 40 to 49 years of age.

Hepatitis C

- The number of reported hepatitis C cases in Missouri decreased from 2015 (7,803 cases) to 2016 (5,088 cases). Please note that this is not likely due to a true decrease in morbidity but is more likely attributed to a change in case definition and data collection methods. Please see the Technical Notes section for more information.
- The rate of reported cases was highest in Butler County (233 per 100,000).
- Among females, the largest numbers of cases were 20 to 29 years of age, while among males the largest numbers of cases were 50 to 59 years of age.

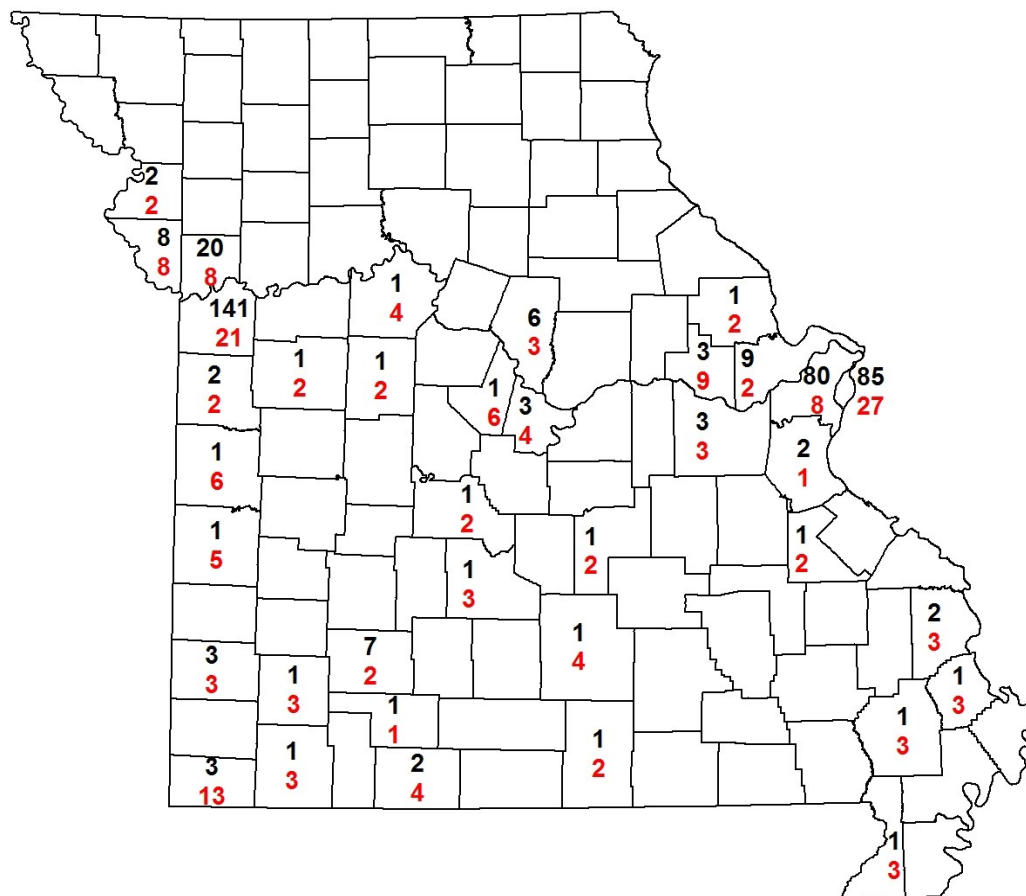
HIV, STD, Hepatitis, and Tuberculosis (TB) disease Co-infections

- There were 670 persons living with HIV who were reported with at least one other STD in 2016.
- Of the 676 early syphilis cases reported in 2016, 31% were among individuals living with HIV. Only 3% of gonorrhea cases and 1% of chlamydia cases reported in 2016 were among individuals living with HIV.
- The St. Louis HIV Care Region represented 77% of all living HIV cases reported with multiple STD co-infections in 2016.
- Although blacks/African Americans represented only 46% of living HIV disease cases, they represented 67% of individuals diagnosed with an STD co-infection.
- Of the 12,606 individuals living with HIV disease, 73 were reported with a hepatitis co-infection in 2016.
- Three percent (3%) of chronic hepatitis B cases and 1% of chronic hepatitis C cases reported in 2016 were among persons living with HIV disease.
- Of the 12,606 individuals living with HIV disease, two were reported with TB disease in 2016.

Table 24. Reported P&S syphilis cases and rates, by sex, HIV care region, and race*, Missouri, 2016								
	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	146	43.7%	6.1	28	42.4%	1.1	174	3.6
Black/African American	162	48.5%	48.2	30	45.5%	8.1	192	27.2
Other/Unknown*	26	7.8%	--	8	12.1%	--	34	--
Total	334	100.0%	11.2	66	100.0%	2.1	400	6.6
St. Louis HIV Care Region								
White	43	26.9%	5.7	7	30.4%	0.9	50	3.2
Black/African American	110	68.8%	59.1	13	56.5%	5.8	123	30.0
Other/Unknown*	7	4.4%	--	3	13.0%	--	10	--
Total	160	100.0%	15.6	23	100.0%	2.1	183	8.6
Kansas City HIV Care Region								
White	73	53.7%	17.3	15	42.9%	3.4	88	10.2
Black/African American	46	33.8%	52.5	15	42.9%	15.2	61	32.7
Other/Unknown*	17	12.5%	--	5	14.3%	--	22	--
Total	136	100.0%	23.3	35	100.0%	5.7	171	14.3
Northwest HIV Care Region								
White	1	50.0%	1.0	0	--	0.0	1	0.5
Black/African American	1	50.0%	17.9	0	--	0.0	1	11.8
Other/Unknown*	0	0.0%	--	0	--	--	0	--
Total	2	100.0%	1.8	0	--	0.0	2	0.9
Central HIV Care Region								
White	8	66.7%	2.1	1	33.3%	0.3	9	1.2
Black/African American	3	25.0%	12.3	2	66.7%	9.8	5	11.2
Other/Unknown*	1	8.3%	--	0	0.0%	--	1	--
Total	12	100.0%	2.7	3	100.0%	0.7	15	1.7
Southwest HIV Care Region								
White	16	88.9%	3.1	5	100.0%	1.0	21	2.0
Black/African American	1	5.6%	6.7	0	0.0%	0.0	1	4.0
Other/Unknown*	1	5.6%	--	0	0.0%	--	1	--
Total	18	100.0%	3.1	5	100.0%	0.9	23	2.0
Southeast HIV Care Region								
White	5	83.3%	2.3	0	--	0.0	5	1.1
Black/African American	1	16.7%	5.8	0	--	0.0	1	3.1
Other/Unknown*	0	0.0%	--	0	--	--	0	--
Total	6	100.0%	2.4	0	--	0.0	6	1.2
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2015 DHSS population estimates.								
Note: Percentages may not total 100% due to rounding.								

A total of 400 P&S syphilis cases were reported in 2016 (Table 24). This number represented an increase from the 307 P&S syphilis cases reported in 2015. The majority of cases (84%) were reported among males. The rate of P&S syphilis cases among males was highest in the Kansas City HIV Care Region (23.3), followed by the St. Louis HIV Care Region (15.6). Forty-six percent (46%) of all P&S syphilis cases were reported in the St. Louis HIV Care Region and 43% were reported in the Kansas City HIV Care Region. The rate of reported P&S syphilis cases was higher for blacks/African Americans compared to whites in all regions.

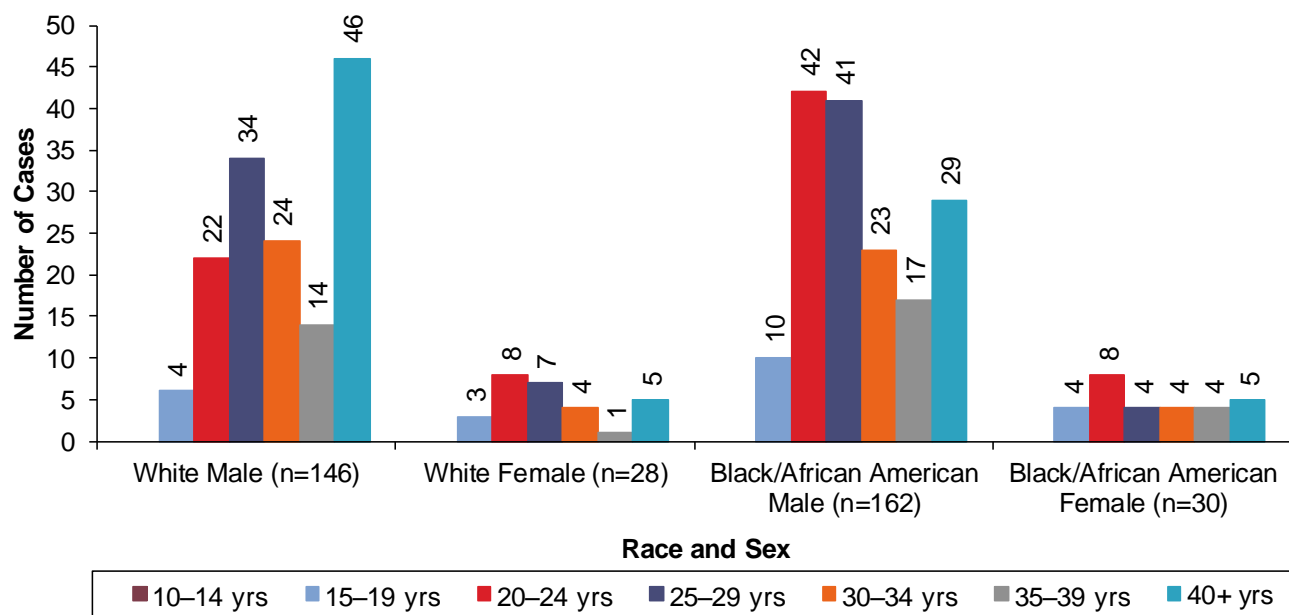
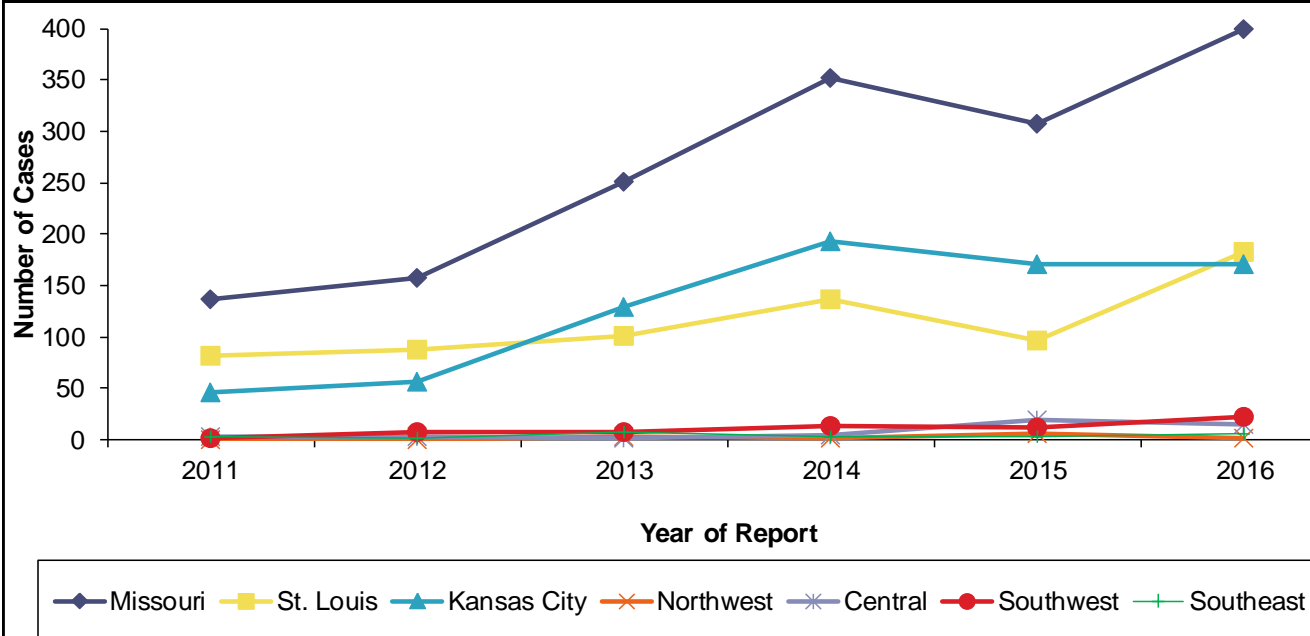
Figure 18. Reported P&S syphilis cases* and rates, by county, Missouri, 2016**



*Case counts are in black.

**Case rates are in red, per 100,000 population based on 2015 DHSS population estimates.

P&S syphilis cases were concentrated in metropolitan areas (Figure 18). There were 78 counties that did not report any P&S syphilis cases in 2016. St. Louis City had the highest rate of reported P&S syphilis cases at 27 per 100,000 persons. This means that for every 100,000 persons living in St. Louis City, there were 27 reported with P&S syphilis in 2016.

Figure 19. Reported P&S syphilis cases, by race and sex and age group at diagnosis, Missouri, 2016**Figure 20. Reported P&S syphilis cases, by HIV care region and year of report, Missouri, 2011-2016**

The largest numbers of P&S syphilis cases were reported among black/African American males (162) and white males (146) (Figure 19). The number of reported cases increased from 2015 to 2016 among all race/ethnicity and sex categories presented. There were differences in the distribution of reported cases by age at diagnosis among the race/ethnicity and sex categories. Among white males, the largest numbers of cases were reported among individuals 40 or more years of age at the time of diagnosis. Among white females, black/African American males, and black/African American females, the largest numbers of cases were reported among individuals 20 to 24 years of age.

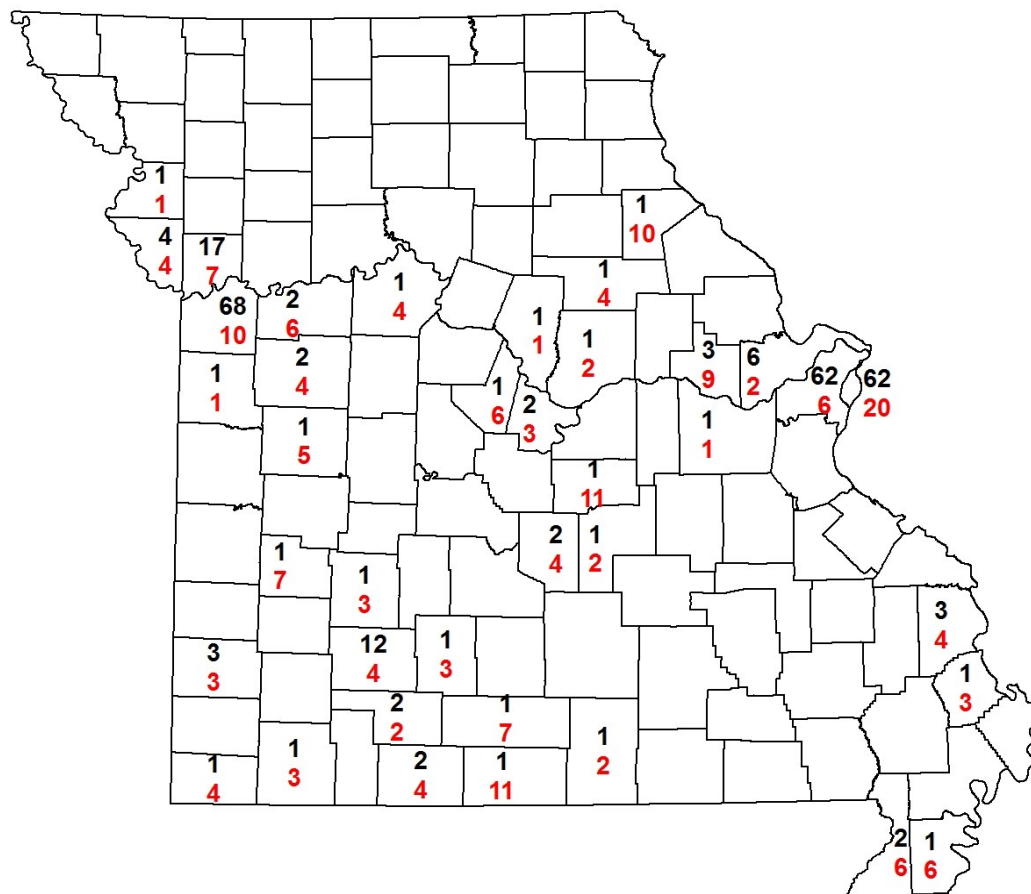
The trend in the number of reported P&S syphilis cases in Missouri has fluctuated from 2011 to 2016, with increases seen from 2011 to 2014, followed by a decrease from 2014 to 2015 and then an increase from 2015 to 2016 (Figure 20). The number of reported P&S syphilis cases increased from 2015 to 2016 in the St. Louis HIV Care Region (96 to 183), the Southwest HIV Care Region (12 to 23), and the Southeast HIV Care Region (3 to 6). The number of reported P&S syphilis cases decreased or remained the same from 2015 to 2016 in the remaining HIV care regions.

Table 25. Reported early latent syphilis cases and rates, by sex, HIV care region and race*, Missouri, 2016

	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	107	46.1%	4.5	20	45.5%	0.8	127	2.6
Black/African American	103	44.4%	30.7	18	40.9%	4.9	121	17.1
Other/Unknown*	22	9.5%	--	6	13.6%	--	28	--
Total	232	100.0%	7.8	44	100.0%	1.4	276	4.5
St. Louis HIV Care Region								
White	37	30.8%	4.9	4	28.6%	0.5	41	2.7
Black/African American	77	64.2%	41.3	9	64.3%	4.0	86	21.0
Other/Unknown*	6	5.0%	--	1	7.1%	--	7	--
Total	120	100.0%	11.7	14	100.0%	1.3	134	6.3
Kansas City HIV Care Region								
White	37	55.2%	8.8	13	52.0%	2.9	50	5.8
Black/African American	20	29.9%	22.8	8	32.0%	8.1	28	15.0
Other/Unknown*	10	14.9%	--	4	16.0%	--	14	--
Total	67	100.0%	11.5	25	100.0%	4.1	92	7.7
Northwest HIV Care Region								
White	1	100.0%	1.0	0	--	0.0	1	0.5
Black/African American	0	0.0%	0.0	0	--	0.0	0	0.0
Other/Unknown*	0	0.0%	--	0	--	--	0	--
Total	1	100.0%	0.9	0	--	0.0	1	0.4
Central HIV Care Region								
White	6	60.0%	1.6	2	100.0%	0.5	8	1.0
Black/African American	3	30.0%	12.3	0	0.0%	0.0	3	6.7
Other/Unknown*	1	10.0%	--	0	0.0%	--	1	--
Total	10	100.0%	2.3	2	100.0%	0.5	12	1.4
Southwest HIV Care Region								
White	23	82.1%	4.5	1	50.0%	0.2	24	2.3
Black/African American	1	3.6%	6.7	0	0.0%	0.0	1	4.0
Other/Unknown*	4	14.3%	--	1	50.0%	--	5	--
Total	28	100.0%	4.8	2	100.0%	0.3	30	2.6
Southeast HIV Care Region								
White	3	50.0%	1.4	0	0.0%	0.0	3	0.7
Black/African American	2	33.3%	11.7	1	100.0%	6.8	3	9.4
Other/Unknown*	1	16.7%	--	0	0.0%	--	1	--
Total	6	100.0%	2.4	1	100.0%	0.4	7	1.4
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2015 DHSS population estimates.								
Note: Percentages may not total 100% due to rounding.								

A total of 276 early latent syphilis cases were reported in 2016, compared to 247 cases reported in 2015 (Table 25). The majority of cases (84%) were reported among males. The rate of early latent syphilis cases was highest in the Kansas City HIV Care Region (7.7), followed by the St. Louis HIV Care Region (6.3). Forty-nine percent (49%) of all early latent syphilis cases were reported in the St. Louis HIV Care Region and 33% were reported in the Kansas City HIV Care Region. The rate of reported early latent syphilis cases was higher for blacks/African Americans compared to whites in all regions that reported cases among blacks/African Americans.

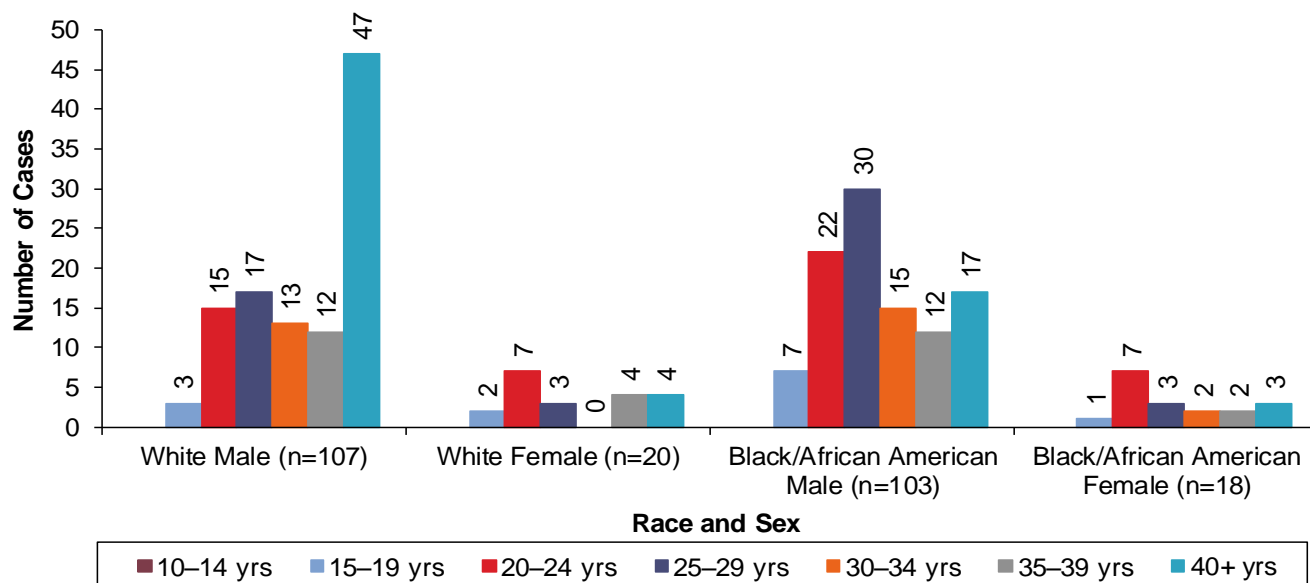
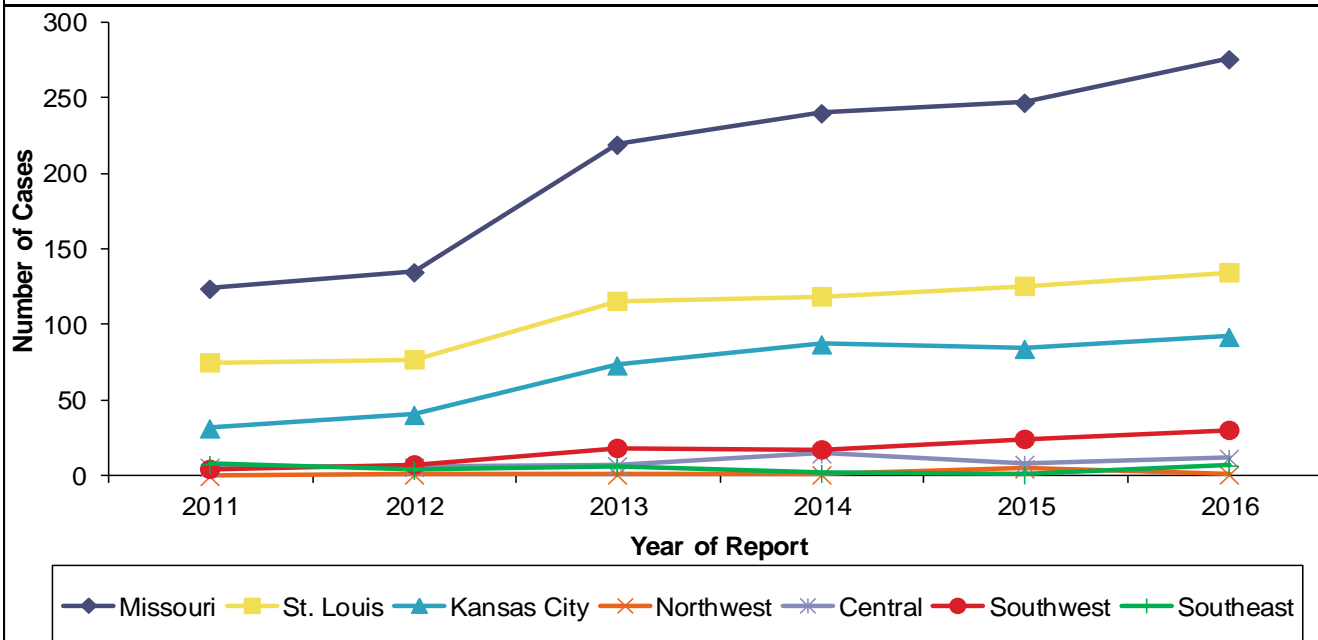
Figure 21. Reported early latent syphilis cases* and rates, by county, Missouri, 2016**



*Case counts are in black.

**Case rates are in red, per 100,000 population based on 2015 DHSS population estimates.

Early latent syphilis cases were concentrated in metropolitan areas (Figure 21). There were 76 counties that did not report any early latent syphilis cases in 2016. Jackson County had the highest number of reported early latent syphilis cases (68). St. Louis City had the highest rate of reported early latent syphilis cases (20 per 100,000). This means that for every 100,000 persons living in St. Louis City, there were 20 reported with early latent syphilis in 2016.

Figure 22. Reported early latent syphilis cases, by race and sex and age group at diagnosis, Missouri, 2016**Figure 23. Reported early latent syphilis cases by HIV care region and year of report, Missouri, 2011-2016**

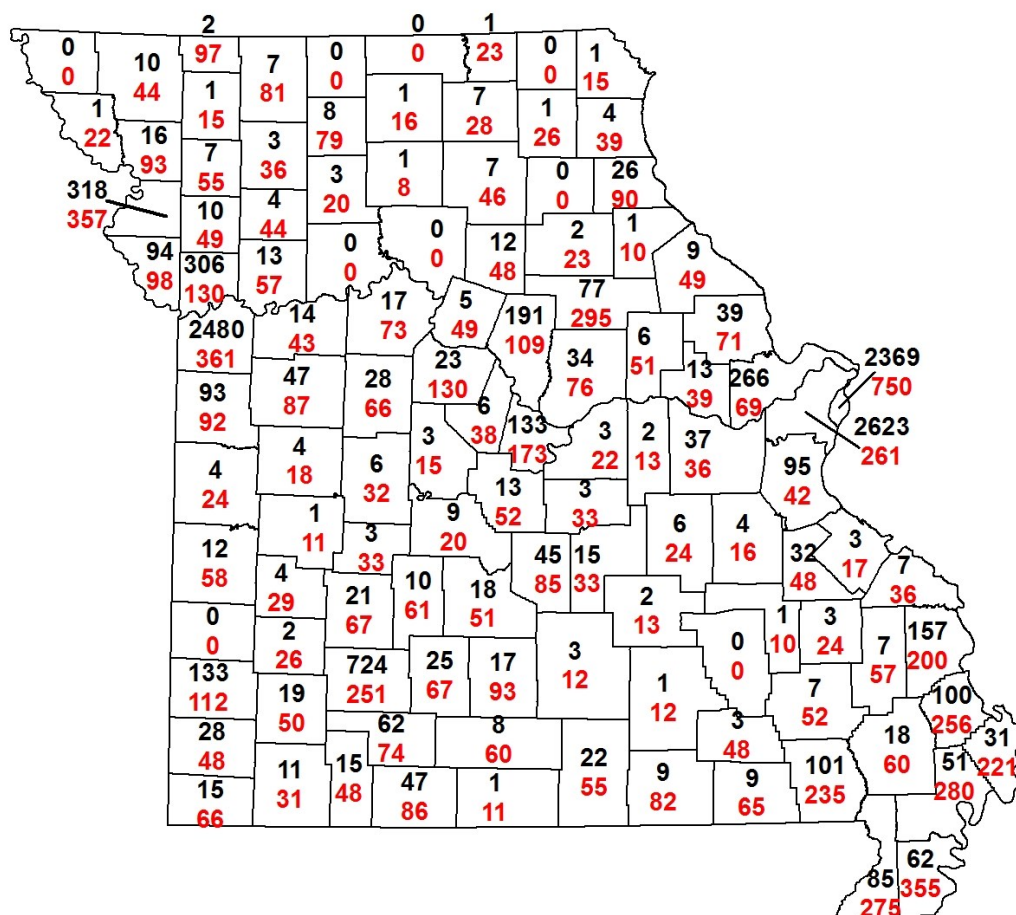
The largest numbers of early latent syphilis cases were reported among white males (107) and black/African American males (103) (Figure 22). The number of reported cases increased among males but decreased among females. From 2015 to 2016 the number of early latent syphilis cases among black/African American males increased from 75 to 103 cases. Among white males, the largest numbers of cases were reported among individuals 40 or more years of age at the time of diagnosis. Among black/African American males, cases were greatest among those 25 to 29 years of age.

The number of reported early latent syphilis cases in Missouri steadily increased from 2011 to 2016 (Figure 23). The number of reported early latent syphilis cases increased from 2015 to 2016 in all HIV care regions with the exception of the Northwest HIV Care Region, where there was a decrease of four cases (5 to 1).

Table 26. Reported gonorrhea cases and rates, by sex, HIV care region and race*, Missouri, 2016								
	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	1,693	27.1%	70.9	1,730	33.1%	70.1	3,423	70.5
Black/African American	3,620	57.9%	1077.8	2,794	53.4%	755.3	6,414	908.8
Other/Unknown*	938	15.0%	--	704	13.5%	--	1,642	--
Total	6,251	100.0%	209.4	5,228	100.0%	168.7	11,479	188.7
St. Louis HIV Care Region								
White	369	11.9%	48.9	288	12.2%	36.6	657	42.6
Black/African American	2,269	73.5%	1218.2	1,733	73.6%	776.3	4,002	977.3
Other/Unknown*	450	14.6%	--	333	14.1%	--	783	--
Total	3,088	100.0%	301.5	2,354	100.0%	214.9	5,442	256.8
Kansas City HIV Care Region								
White	444	27.6%	105.2	413	29.4%	93.6	857	99.3
Black/African American	915	57.0%	1044.4	802	57.1%	812.6	1,717	921.6
Other/Unknown*	247	15.4%	--	189	13.5%	--	436	--
Total	1,606	100.0%	275.3	1,404	100.0%	228.7	3,010	251.4
Northwest HIV Care Region								
White	119	64.0%	119.8	156	80.4%	153.3	275	136.7
Black/African American	37	19.9%	664.0	19	9.8%	658.8	56	662.3
Other/Unknown*	30	16.1%	--	19	9.8%	--	49	--
Total	186	100.0%	165.2	194	100.0%	174.0	380	169.5
Central HIV Care Region								
White	157	46.2%	41.0	219	63.1%	56.0	376	48.6
Black/African American	118	34.7%	483.9	78	22.5%	383.9	196	438.4
Other/Unknown*	65	19.1%	--	50	14.4%	--	115	--
Total	340	100.0%	77.5	347	100.0%	78.5	687	78.0
Southwest HIV Care Region								
White	490	69.0%	96.0	454	80.6%	86.6	944	91.2
Black/African American	115	16.2%	771.3	40	7.1%	400.7	155	622.7
Other/Unknown*	105	14.8%	--	69	12.3%	--	174	--
Total	710	100.0%	122.8	563	100.0%	96.2	1,273	109.4
Southeast HIV Care Region								
White	114	35.5%	52.1	200	54.6%	89.2	314	70.9
Black/African American	166	51.7%	969.3	122	33.3%	825.6	288	902.7
Other/Unknown*	41	12.8%	--	44	12.0%	--	85	--
Total	321	100.0%	129.5	366	100.0%	146.0	687	137.8
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2015 DHSS population estimates.								
Note: Percentages may not total 100% due to rounding.								

A total of 11,479 gonorrhea cases were reported in 2016 (Table 26). This represented a 28% increase in the number of reported cases compared to 2015 (8,942 cases). The majority of cases (54%) were reported among males. Forty-seven percent (47%) of all gonorrhea cases were reported in the St. Louis HIV Care Region and 26% were reported in the Kansas City HIV Care Region. The Southwest HIV Care Region had the third largest number of gonorrhea cases reported. The rate of reported gonorrhea cases was higher for blacks/African Americans compared to whites in all regions.

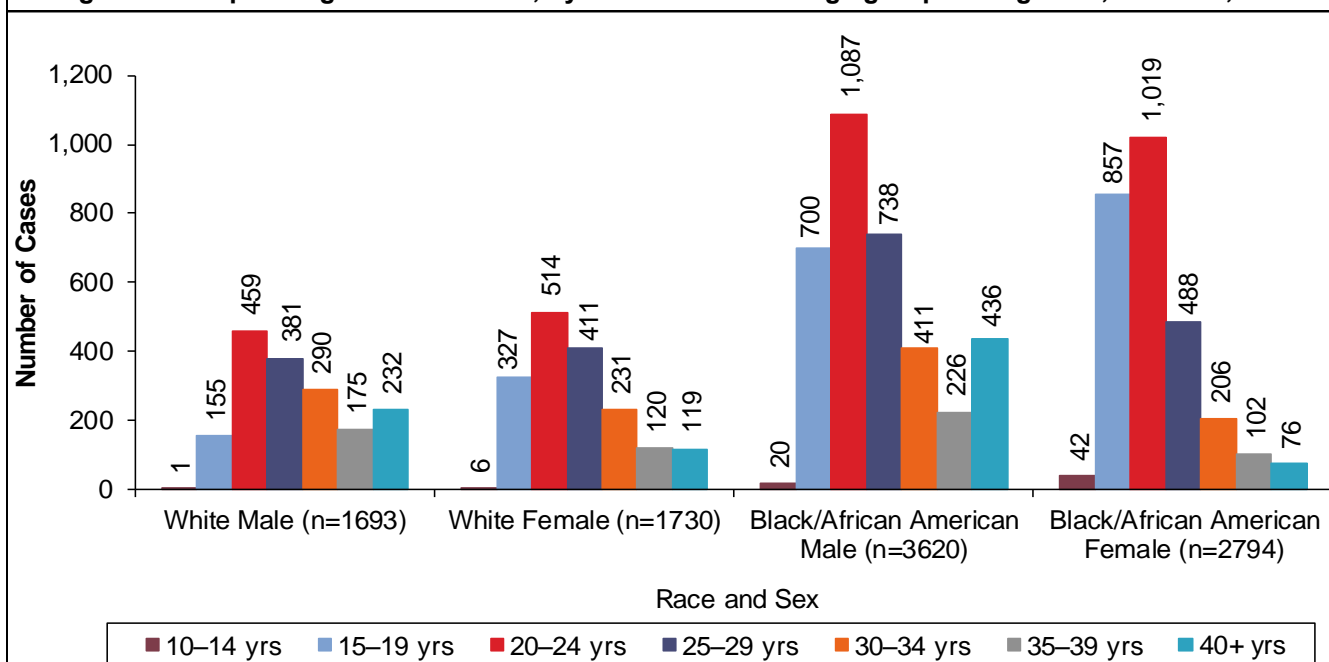
Figure 24. Reported gonorrhea cases* and rates, by county, Missouri, 2016**



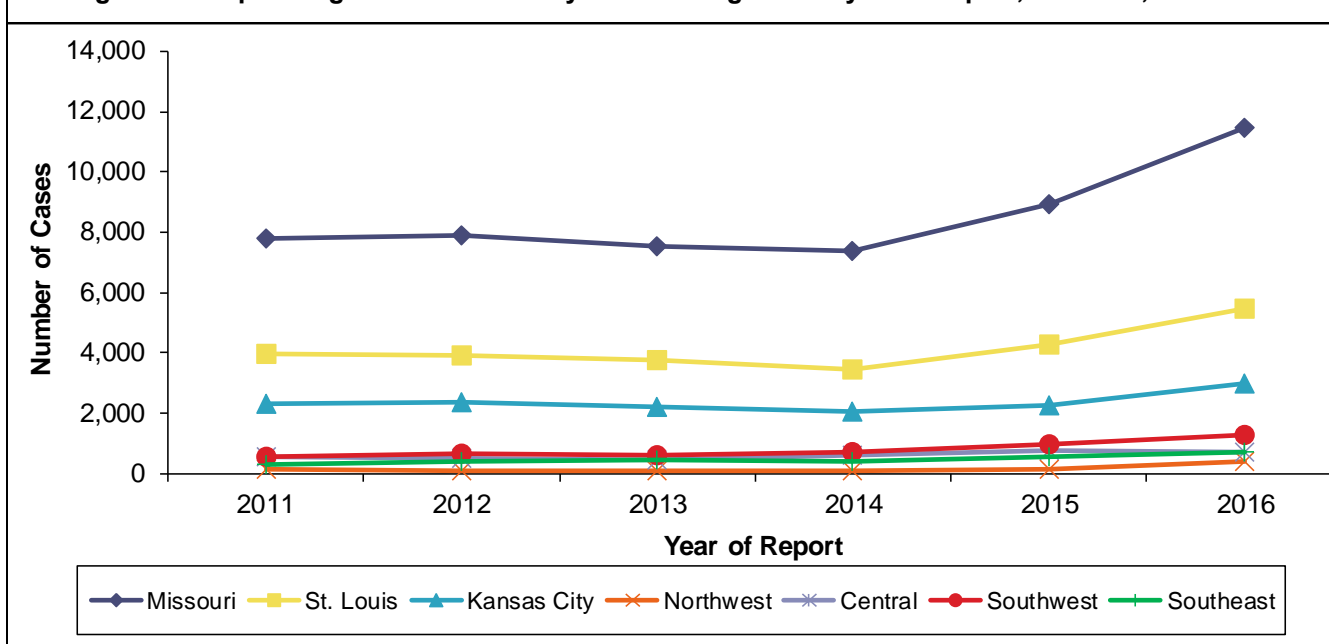
*Case counts are in black.

**Case rates are in red, per 100,000 population based on 2015 DHSS population estimates.

Gonorrhea cases reported in St. Louis City, St. Louis County, and Jackson County represented 65% of all reported cases in 2016 (Figure 24). There were nine counties that did not report any gonorrhea cases in 2016. St. Louis County had the highest number of reported gonorrhea cases (2,623). St. Louis City had the highest rate of reported gonorrhea cases at 750 per 100,000 persons. This means that for every 100,000 persons living in St. Louis City, there were 750 reported with gonorrhea in 2016.

Figure 25. Reported gonorrhea cases, by race and sex and age group at diagnosis, Missouri, 2016

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

Figure 26. Reported gonorrhea cases by HIV care region and year of report, Missouri, 2011-2016

The largest numbers of gonorrhea cases were reported among black/African American males (3,620) and black/African American females (2,794) (Figure 25). The number of reported cases increased from 2015 to 2016 among all race/ethnicity and sex categories presented. Among all race/ethnicity and sex categories presented, the largest numbers of cases were reported among individuals 20 to 24 years of age at the time of diagnosis. A greater proportion of gonorrhea cases among white males (14%) and black/African American males (12%) was diagnosed among individuals 40 or more years of age compared to female cases.

The number of reported gonorrhea cases in Missouri increased from 2011 to 2012, decreased through 2014, and then increased through 2016 (Figure 26). The number of reported gonorrhea cases was higher in 2016 than 2015 in all HIV care regions except for the Central HIV Care Region.

Table 27. Reported chlamydia cases and rates, by sex, HIV care region and race*, Missouri, 2016								
	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	3,649	36.2%	152.8	8,954	43.1%	362.6	12,603	259.5
Black/African American	4,348	43.1%	1294.6	7,398	35.6%	2000.0	11,746	1664.3
Other/Unknown*	2,089	20.7%	--	4,405	21.2%	--	6,494	--
Total	10,086	100.0%	337.9	20,757	100.0%	669.9	30,843	507.0
St. Louis HIV Care Region								
White	852	20.9%	113.0	1,780	22.4%	226.2	2,632	170.8
Black/African American	2,326	57.1%	1248.8	4,259	53.7%	1907.8	6,585	1608.1
Other/Unknown*	896	22.0%	--	1,890	23.8%	--	2,786	--
Total	4,074	100.0%	397.8	7,929	100.0%	724.0	12,003	566.3
Kansas City HIV Care Region								
White	679	27.7%	160.8	1,756	34.8%	398.0	2,435	282.0
Black/African American	1,184	48.2%	1351.4	2,159	42.8%	2187.6	3,343	1794.4
Other/Unknown*	592	24.1%	--	1,130	22.4%	--	1,722	--
Total	2,455	100.0%	420.9	5,045	100.0%	822.0	7,500	626.5
Northwest HIV Care Region								
White	183	64.9%	184.2	470	79.1%	461.9	653	324.7
Black/African American	51	18.1%	915.3	40	6.7%	1387.0	91	1076.2
Other/Unknown*	48	17.0%	--	84	14.1%	--	132	--
Total	282	100.0%	250.4	594	100.0%	532.7	876	390.9
Central HIV Care Region								
White	591	51.2%	154.2	1,687	64.0%	431.7	2,278	294.3
Black/African American	346	30.0%	1419.0	467	17.7%	2298.3	813	1818.7
Other/Unknown*	217	18.8%	--	481	18.3%	--	698	--
Total	1,154	100.0%	263.1	2,635	100.0%	596.2	3,789	430.3
Southwest HIV Care Region								
White	1,096	68.7%	214.6	2,416	75.8%	460.8	3,512	339.3
Black/African American	248	15.5%	1663.4	178	5.6%	1783.0	426	1711.4
Other/Unknown*	252	15.8%	--	594	18.6%	--	846	--
Total	1,596	100.0%	276.0	3,188	100.0%	544.5	4,784	411.0
Southeast HIV Care Region								
White	248	47.2%	113.3	845	61.9%	376.9	1,093	246.6
Black/African American	193	36.8%	1126.9	295	21.6%	1996.3	488	1529.6
Other/Unknown*	84	16.0%	--	226	16.5%	--	310	--
Total	525	100.0%	211.7	1,366	100.0%	545.1	1,891	379.3
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2015 DHSS population estimates.								
Note: Percentages may not total 100% due to rounding.								

A total of 30,843 chlamydia cases were reported in 2016 (Table 27). This represented a 7% increase in cases reported from 2015 (28,948 cases). The majority of cases (67%) were reported among females. The rate of chlamydia cases among females was highest in the Kansas City HIV Care Region (822), followed by the St. Louis HIV Care Region (724). Thirty-nine percent (39%) of all chlamydia cases were reported in the St. Louis HIV Care Region and 24% were reported in the Kansas City HIV Care Region. The Southwest HIV Region had the third largest number of chlamydia cases reported. The rate of reported chlamydia cases was higher for blacks/African Americans compared to whites in all regions.

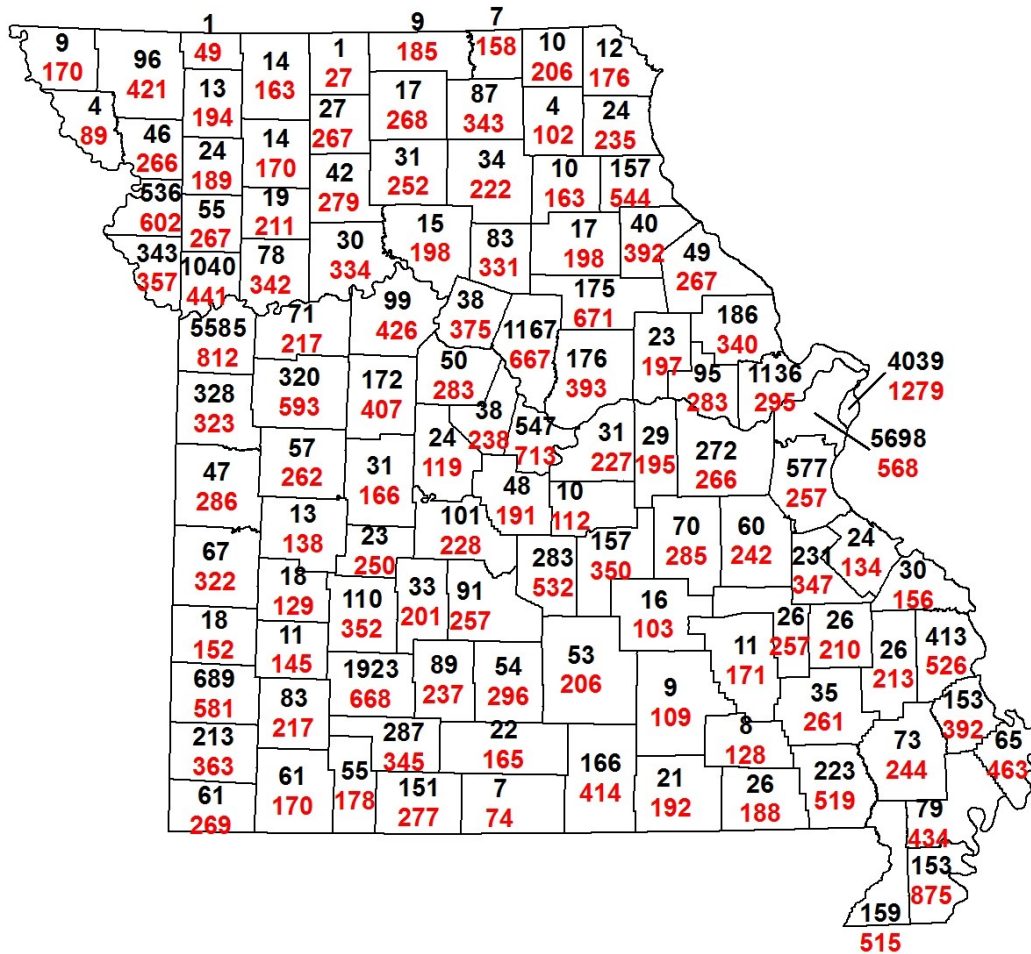
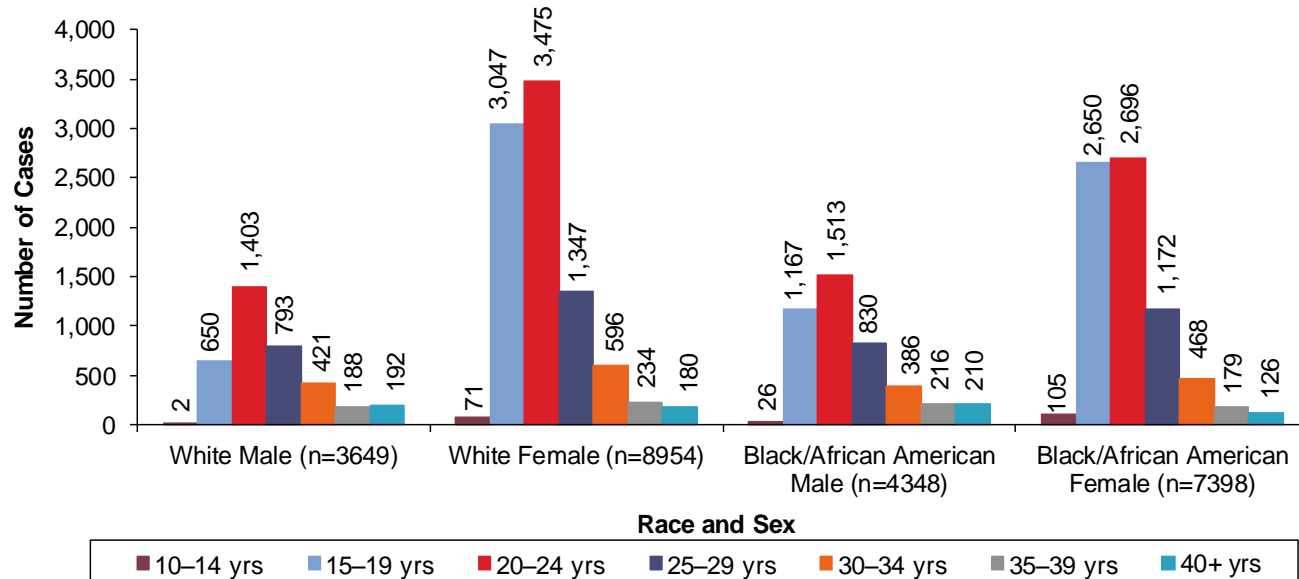
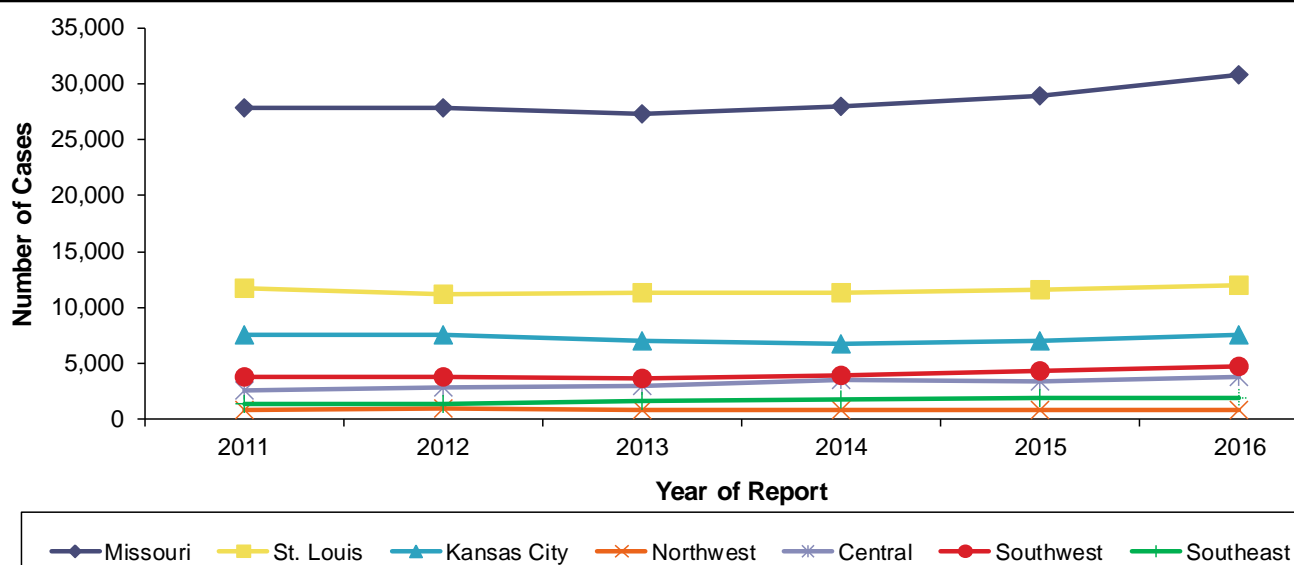
Figure 27. Reported chlamydia cases* and rates, by county, Missouri, 2016**

Figure 28. Reported chlamydia cases, by race and sex and age group at diagnosis, Missouri, 2016

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

Figure 29. Reported chlamydia cases, by HIV care region and year of report, Missouri, 2011-2016

The largest numbers of chlamydia cases were reported among white females (8,954) and black/African American females (7,398) (Figure 28). The number of reported cases increased from 2015 to 2016 among all race/ethnicity and sex categories presented. Among all race/ethnicity and sex categories presented, the largest numbers of cases were reported among individuals 20 to 24 years of age at the time of diagnosis. The proportion of reported cases among individuals 15 to 19 years of age at the time of diagnosis was highest among white females (41%) and black/African American females (35%).

The number of reported chlamydia cases in Missouri increased from 2010 to 2011, decreased slightly through 2013, and then increased through 2016 (Figure 29). The number of reported chlamydia cases increased from 2015 to 2016 in all HIV care regions.

Table 28. Reported hepatitis B[†] cases and rates, by sex, HIV care region and race*, Missouri, 2016								
	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	78	28.1%	3.3	58	20.4%	2.3	136	2.8
Black/African American	49	17.6%	14.6	49	17.3%	13.2	98	13.9
Other/Unknown*	151	54.3%	--	177	62.3%	--	328	--
Total	278	100.0%	9.3	284	100.0%	9.2	562	9.2
St. Louis HIV Care Region								
White	21	21.2%	2.8	18	15.4%	2.3	39	2.5
Black/African American	26	26.3%	14.0	31	26.5%	13.9	57	13.9
Other/Unknown*	52	52.5%	--	68	58.1%	--	120	--
Total	99	100.0%	9.7	117	100.0%	10.7	216	10.2
Kansas City HIV Care Region								
White	4	6.7%	0.9	8	11.8%	1.8	12	1.4
Black/African American	9	15.0%	10.3	12	17.6%	12.2	21	11.3
Other/Unknown*	47	78.3%	--	48	70.6%	--	95	--
Total	60	100.0%	10.3	68	100.0%	11.1	128	10.7
Northwest HIV Care Region								
White	4	40.0%	4.0	1	11.1%	1.0	5	2.5
Black/African American	1	10.0%	17.9	0	0.0%	0.0	1	11.8
Other/Unknown*	5	50.0%	--	8	88.9%	--	13	--
Total	10	100.0%	8.9	9	100.0%	8.1	19	8.5
Central HIV Care Region								
White	15	42.9%	3.9	10	37.0%	2.6	25	3.2
Black/African American	4	11.4%	16.4	5	18.5%	24.6	9	20.1
Other/Unknown*	16	45.7%	--	12	44.4%	--	28	--
Total	35	100.0%	8.0	27	100.0%	6.1	62	7.0
Southwest HIV Care Region								
White	19	36.5%	3.7	15	32.6%	2.9	34	3.3
Black/African American	4	7.7%	26.8	0	0.0%	0.0	4	16.1
Other/Unknown*	29	55.8%	--	31	67.4%	--	60	--
Total	52	100.0%	9.0	46	100.0%	7.9	98	8.4
Southeast HIV Care Region								
White	15	68.2%	6.9	6	35.3%	2.7	21	4.7
Black/African American	5	22.7%	29.2	1	5.9%	6.8	6	18.8
Other/Unknown*	2	9.1%	--	10	58.8%	--	12	--
Total	22	100.0%	8.9	17	100.0%	6.8	39	7.8
[†] Includes confirmed and probable case classifications of hepatitis B acute, hepatitis B chronic, hepatitis B prenatal, and hepatitis B perinatal. *Includes cases identified with Hispanic ethnicity. **Per 100,000 population based on 2015 DHSS population estimates. Note: Percentages may not total 100% due to rounding.								

Of the 562 hepatitis B cases reported in 2016, 40 were reported with acute hepatitis B, 418 with chronic hepatitis B, and 104 with prenatal hepatitis B (Table 28). There were no perinatal hepatitis B cases reported in 2016. The number of reported hepatitis B cases in Missouri decreased by 142 cases from 2015 (704) to 2016 (562). The number of individuals reported with hepatitis B decreased from 2015 to 2016 in all HIV care regions except for the Northwest and Southeast HIV Care Regions. The rate of reported hepatitis B cases was highest in the Kansas City HIV Care Region (11). Overall, 51% of reported cases were females, although variations in the ratio of male-to-female cases existed among the HIV care regions. The large proportion of cases with unknown race/ethnicity information makes it difficult to interpret differences in reported infections by race/ethnicity.

Figure 30. Reported hepatitis B cases* and rates, by jurisdiction, Missouri, 2016**

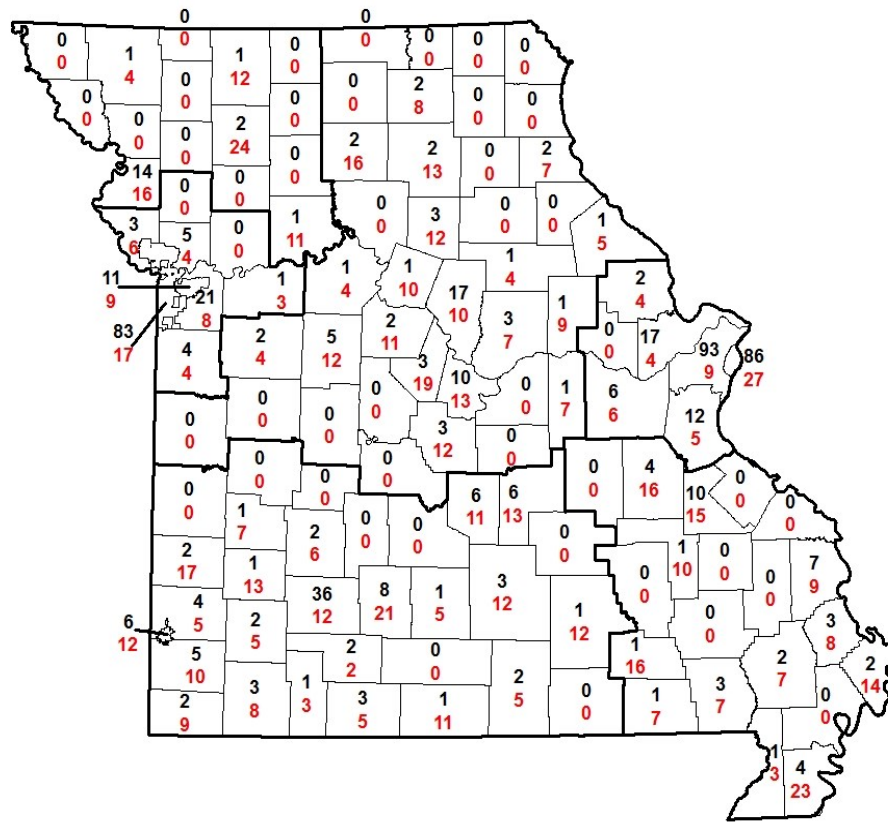
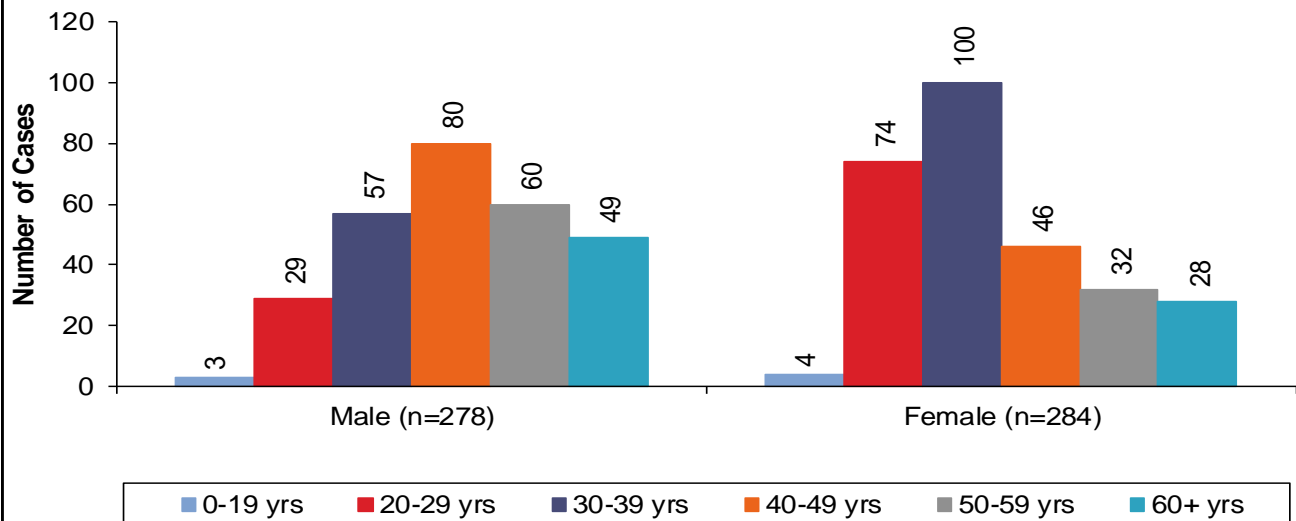


Figure 31. Reported hepatitis B cases, by sex and age group at diagnosis, Missouri, 2016



Note: Totals include persons whose age at diagnosis is unknown.

St. Louis County had the greatest number of reported hepatitis B cases (93), followed by St. Louis City (86) (Figure 30). There were 47 jurisdictions that did not report any hepatitis B cases in 2016.

There were differences in the age distribution of reported hepatitis B cases by sex (Figure 31). Among males, the largest numbers of reported cases were among individuals 40 to 49 years of age. The largest numbers of cases among females were individuals 30 to 39 years of age at diagnosis.

Table 29. Reported hepatitis C[†] cases and rates, by sex, HIV care region and race*, Missouri, 2016								
	Male			Female			Total[‡]	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	1,177	37.0%	49.3	932	48.8%	37.7	2,109	43.4
Black/African American	506	15.9%	150.7	196	10.3%	53.0	702	99.5
Other/Unknown*	1,495	47.0%	--	782	40.9%	--	2,277	--
Total	3,178	100.0%	106.5	1,910	100.0%	61.6	5,088	83.6
St. Louis HIV Care Region								
White	324	26.7%	43.0	248	39.4%	31.5	572	37.1
Black/African American	387	31.9%	207.8	158	25.1%	70.8	545	133.1
Other/Unknown*	504	41.5%	--	223	35.5%	--	727	--
Total	1,215	100.0%	118.6	629	100.0%	57.4	1,844	87.0
Kansas City HIV Care Region								
White	131	25.0%	31.0	100	34.5%	22.7	231	26.8
Black/African American	57	10.9%	65.1	29	10.0%	29.4	86	46.2
Other/Unknown*	337	64.2%	--	161	55.5%	--	498	--
Total	525	100.0%	90.0	290	100.0%	47.2	815	68.1
Northwest HIV Care Region								
White	64	61.0%	64.4	55	67.1%	54.1	119	59.2
Black/African American	5	4.8%	89.7	2	2.4%	69.3	7	82.8
Other/Unknown*	36	34.3%	--	25	30.5%	--	61	--
Total	105	100.0%	93.2	82	100.0%	73.5	187	83.4
Central HIV Care Region								
White	159	46.5%	41.5	115	54.0%	29.4	274	35.4
Black/African American	18	5.3%	73.8	3	1.4%	14.8	21	47.0
Other/Unknown*	165	48.2%	--	95	44.6%	--	260	--
Total	342	100.0%	78.0	213	100.0%	48.2	555	63.0
Southwest HIV Care Region								
White	351	52.9%	68.7	306	61.8%	58.4	657	63.5
Black/African American	20	3.0%	134.1	2	0.4%	20.0	22	88.4
Other/Unknown*	292	44.0%	--	187	37.8%	--	479	--
Total	663	100.0%	114.6	495	100.0%	84.5	1,158	99.5
Southeast HIV Care Region								
White	148	45.1%	67.6	108	53.7%	48.2	256	57.8
Black/African American	19	5.8%	110.9	2	1.0%	13.5	21	65.8
Other/Unknown*	161	49.1%	--	91	45.3%	--	252	--
Total	328	100.0%	132.3	201	100.0%	80.2	529	106.1
[†] Includes confirmed and probable case classifications of hepatitis C acute and hepatitis C chronic. [*] Includes cases identified with Hispanic ethnicity. [‡] Includes persons with unknown or other sex. ^{**} Per 100,000 population based on 2015 DHSS population estimates. Note: Percentages may not total 100% due to rounding.								

Of the 5,088 hepatitis C cases reported in 2016, 24 were reported with acute hepatitis C and 5,064 with chronic hepatitis C. The number of reported hepatitis C cases in Missouri decreased by 2,715 cases from 2015 (7,803) to 2016 (5,088) (Table 29). However, the decrease is not likely due to a true decrease in morbidity but is more likely due to data collection methods and the inability for Missouri's current reportable disease surveillance system to account for hepatitis C case definition changes. Please see the Technical Notes section for more information. The number of persons reported with hepatitis C decreased from 2015 to 2016 in all HIV care regions. Overall, the rate of reported hepatitis C cases was highest in the Southeast HIV Care Region (106). In Missouri overall, 62% of the reported cases were males. The large proportion of cases with unknown race/ethnicity information makes it difficult to interpret differences in reported infections by race/ethnicity.

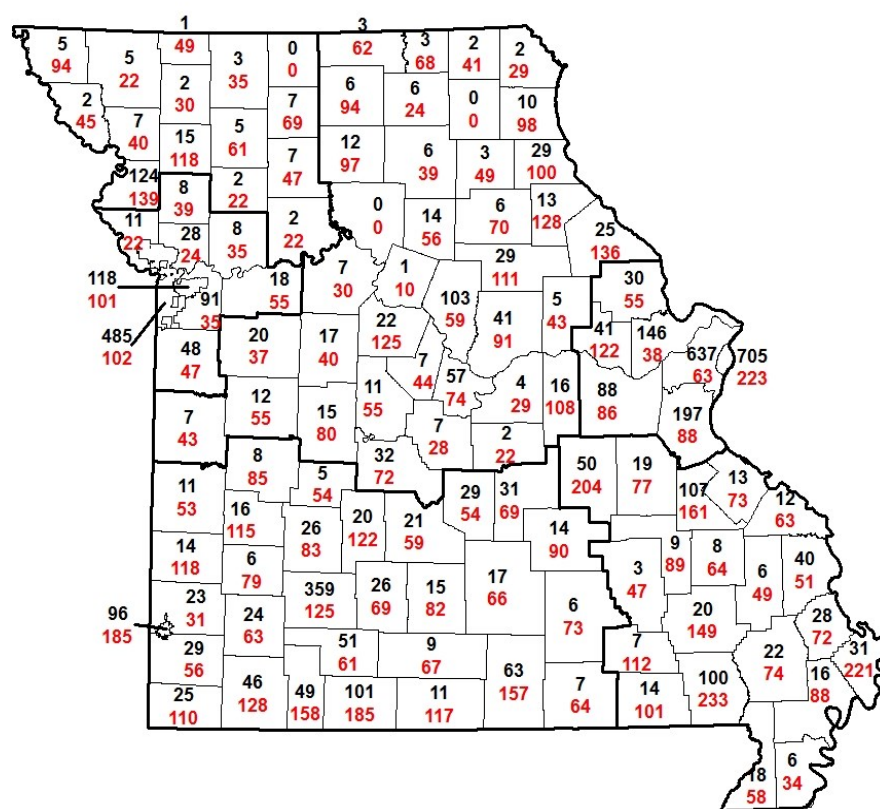
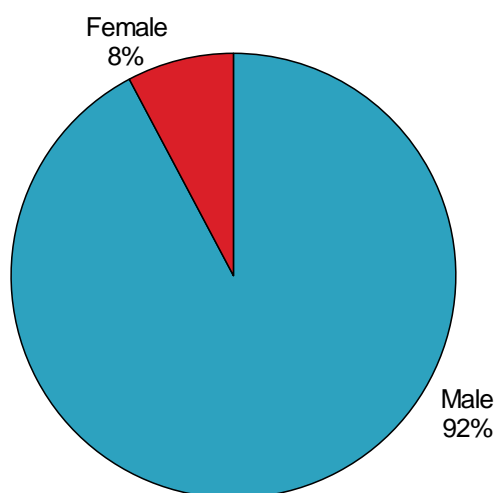
Figure 32. Reported hepatitis C cases* and rates, by jurisdiction, Missouri, 2016**

Table 30. HIV and STD co-infections, by HIV diagnosis year and type of co-infection, Missouri, 2016

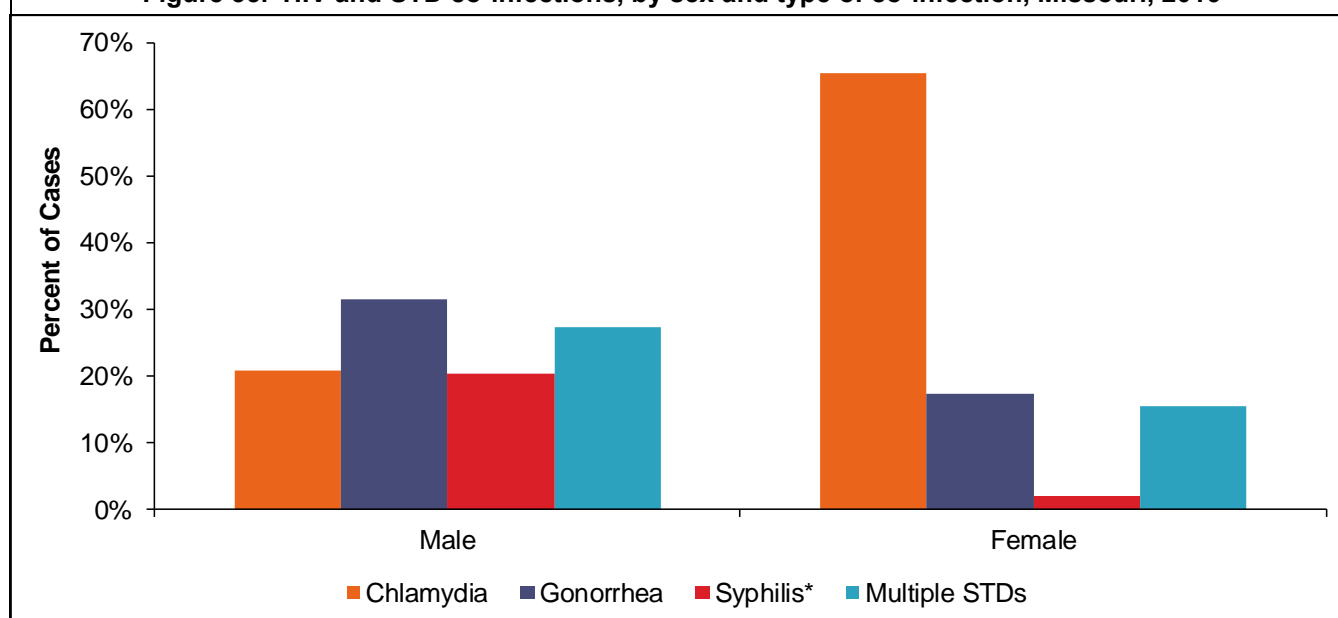
Co-infection	Diagnosed with HIV Prior to 2016		Diagnosed with HIV in 2016		Total	
	N	%	N	%	N	%
Chlamydia	137	24.8%	26	22.2%	163	24.3%
Gonorrhea	165	29.8%	38	32.5%	203	30.3%
Syphilis*	110	19.9%	17	14.5%	127	19.0%
Chlamydia and Gonorrhea	80	14.5%	16	13.7%	96	14.3%
Chlamydia and Syphilis*	12	2.2%	2	1.7%	14	2.1%
Gonorrhea and Syphilis*	26	4.7%	9	7.7%	35	5.2%
Chlamydia, Gonorrhea, and Syphilis*	23	4.2%	9	7.7%	32	4.8%
Total	553	100.0%	117	100.0%	670	100.0%

*Represents early syphilis, which only includes diagnoses of primary, secondary, and early latent syphilis.
Note: Percentages may not total 100% due to rounding.

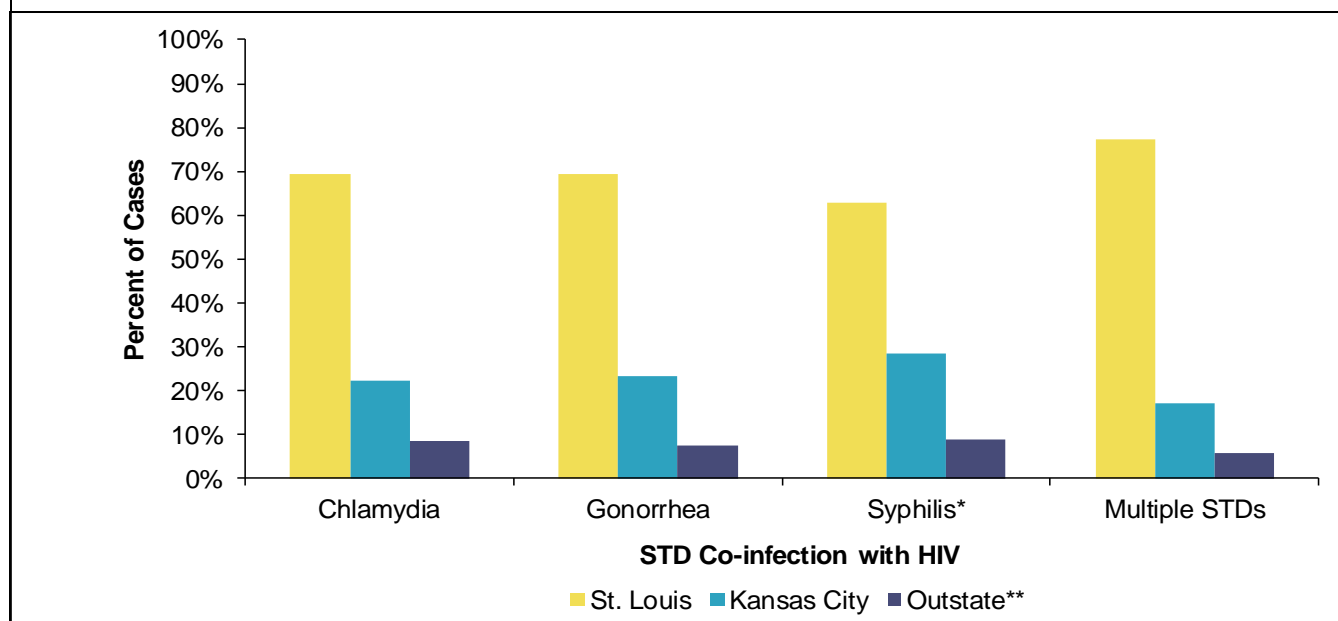
Figure 34. HIV and STD co-infections by sex, Missouri, 2016

Of the 12,606 individuals living with HIV disease, 670 were reported with an STD co-infection in 2016 (Table 30). The majority of those reported with an STD co-infection were diagnosed with HIV prior to 2016 (83%). The largest numbers of HIV co-infections were with gonorrhea alone and chlamydia alone. The proportion of reported STD infections in 2016 that were living with HIV varied by infection type. Only 3% of gonorrhea cases and 1% of chlamydia cases reported in 2016 were among individuals living with HIV. Of the 676 early syphilis cases reported in 2016, 31% were among individuals living with HIV.

Of the 670 reported STD co-infection cases, 92% were among males (Figure 34).

Figure 35. HIV and STD co-infections, by sex and type of co-infection, Missouri, 2016

*Represents early syphilis, which only includes diagnoses of primary, secondary, and early latent syphilis.

Figure 36. HIV and STD co-infections, by HIV care region of STD diagnosis and type of co-infection, Missouri, 2016

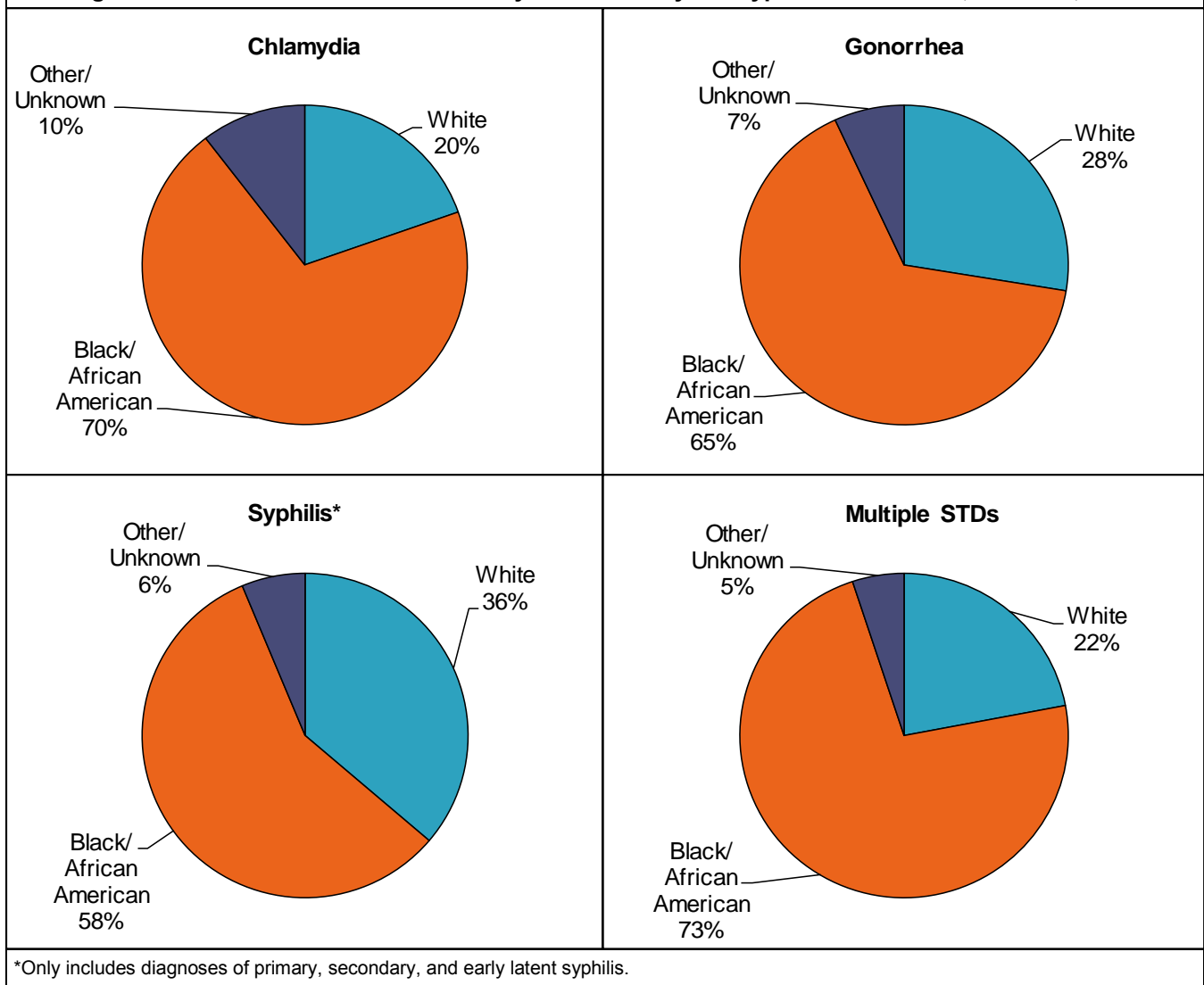
*Represents early syphilis, which only includes diagnoses of primary, secondary, and early latent syphilis.

**Includes those diagnosed in the Central, Northwest, Southeast, and Southwest HIV Care Regions.

There were differences in the distribution of STD co-infection types by sex (Figure 35). Among females living with HIV who were reported with an STD co-infection in 2016, 65% were co-infected with chlamydia, 17% with gonorrhea, 15% with multiple STDs, and 2% with early syphilis. Among males living with HIV and reported with an STD co-infection in 2016, 31% were co-infected with gonorrhea, 27% with multiple STDs, 21% with chlamydia, and 20% with early syphilis.

Among all HIV and STD co-infection types, the greatest proportion of cases was diagnosed in the St. Louis HIV Care Region (Figure 36). Among those living with HIV who were reported with chlamydia in 2016, 69% were residents of the St. Louis HIV Care Region when diagnosed with chlamydia. The St. Louis HIV Care Region represented 70% of all living HIV cases reported with gonorrhea in 2016, 63% of those with early syphilis, and 77% of those with multiple STD co-infections. In St. Louis, STD co-infection with HIV was highest for multiple STDs, while in Kansas City and Outstate, STD co-infection with HIV was highest for early syphilis.

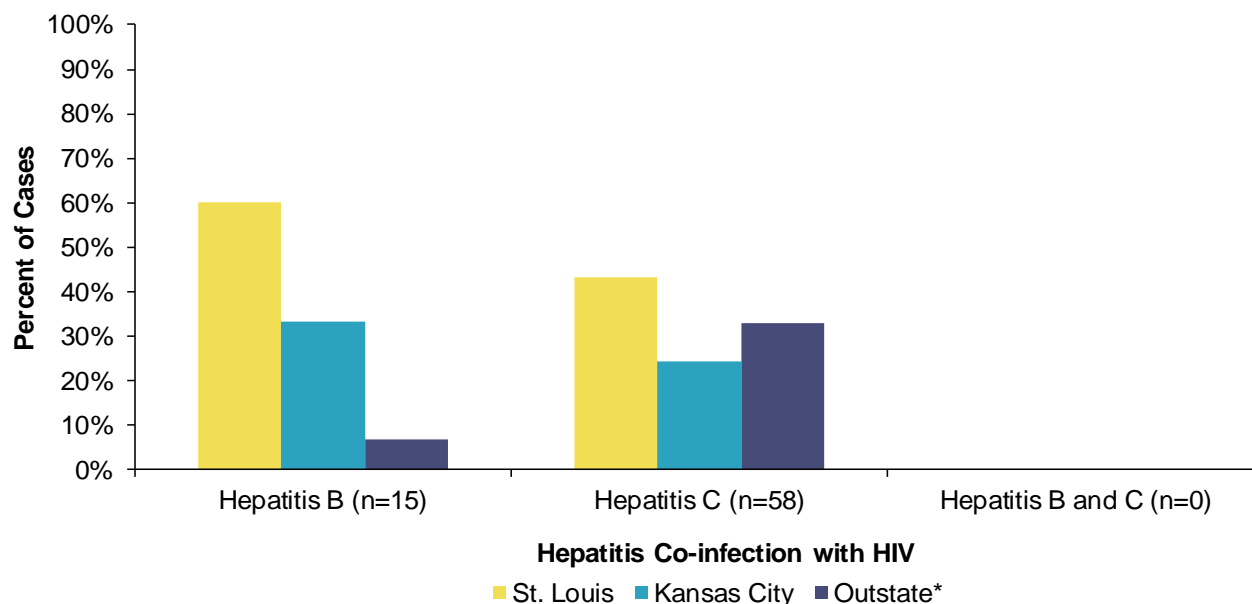
Figure 37. HIV and STD co-infections by race/ethnicity and type of co-infection, Missouri, 2016



There were differences in the distribution of race/ethnicity among HIV and STD co-infections depending on the type of STD diagnosed (Figure 37). The proportion of co-infection cases attributed to blacks/African Americans was highest among those co-infected with multiple STDs (73%), followed by those co-infected with chlamydia (70%). In all instances, people of color were disproportionately represented in the proportion of co-infections that were reported. Although blacks/African Americans represented only 46% of living HIV disease cases, they represented 67% of individuals diagnosed with an STD co-infection.

Table 31. HIV and hepatitis co-infections, by HIV diagnosis year and type of co-infection, Missouri, 2016

Co-infection	Diagnosed with HIV Prior to 2016	Diagnosed with HIV in 2016	Total Co-infections
	N	N	N
Acute Hepatitis B	0	0	0
Chronic Hepatitis B	15	0	15
Prenatal Hepatitis B	0	0	0
Perinatal Hepatitis B	0	0	0
Acute Hepatitis C	0	0	0
Chronic Hepatitis C	44	14	58
Chronic Hepatitis B & C	0	0	0
Total	59	14	73

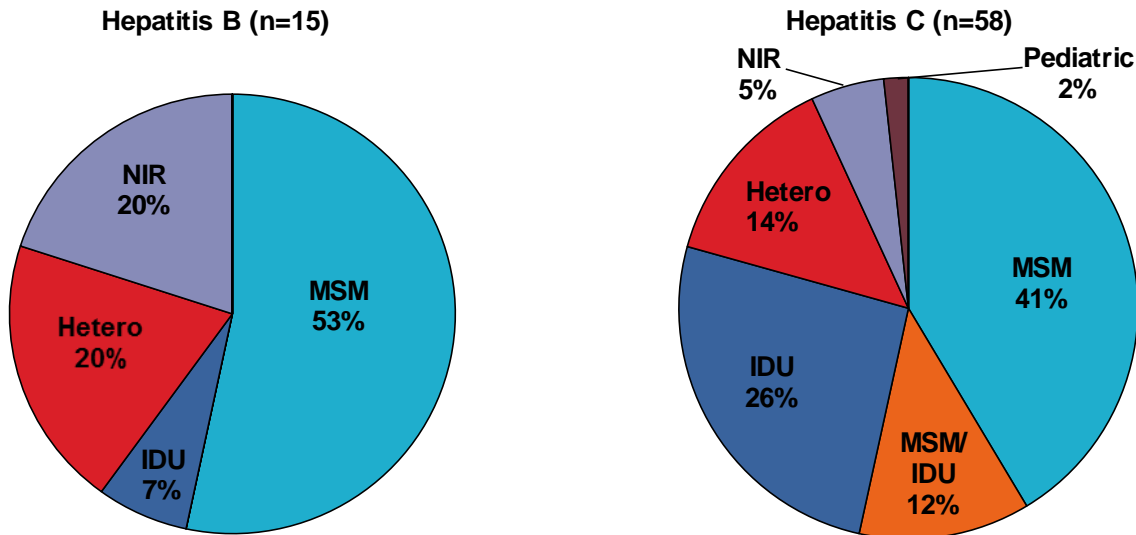
Figure 38. HIV and hepatitis co-infections, by HIV care region of hepatitis diagnosis and type of co-infection, Missouri, 2016

*Includes those diagnosed in the Central, Northwest, Southeast, and Southwest HIV Care Regions.

Of the 12,606 individuals living with HIV disease, 73 were reported with a hepatitis co-infection in 2016 (Table 31). The majority of those reported with a hepatitis co-infection were diagnosed with HIV prior to 2016 (81%). The largest number of HIV co-infections was with chronic hepatitis C. The proportion of reported hepatitis infections in 2016 that were living with HIV varied by infection type. Of the 418 chronic hepatitis B cases reported in 2016, 3% were among individuals living with HIV. Only 1% of chronic hepatitis C cases reported in 2016 were among individuals living with HIV.

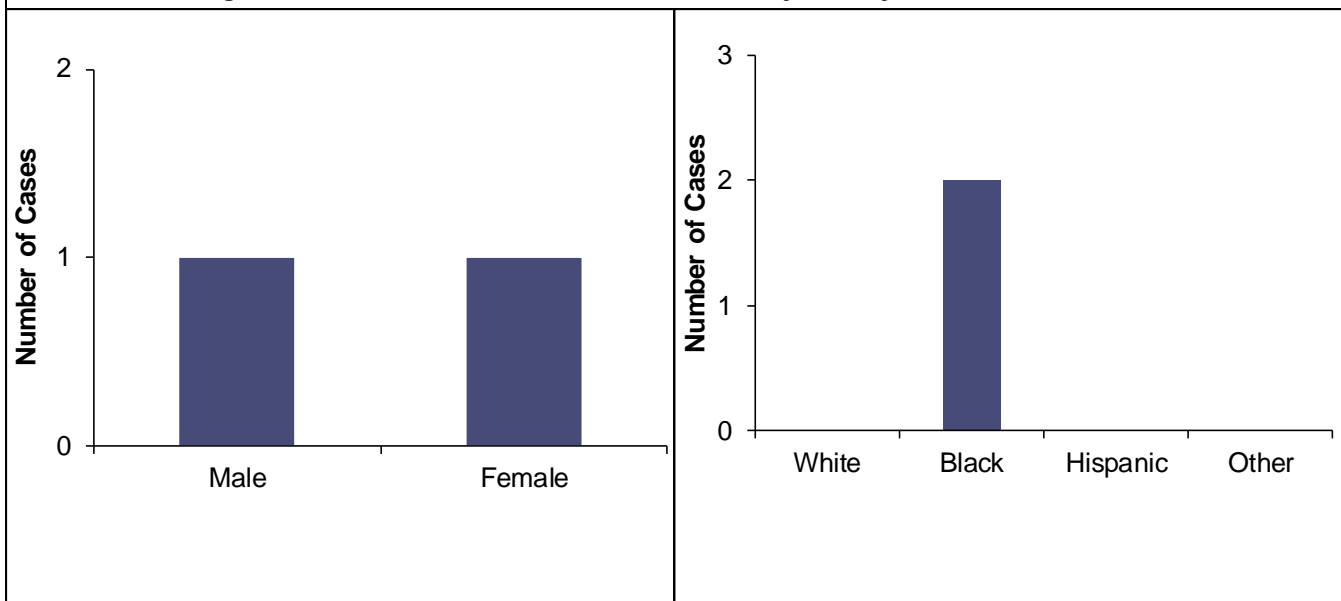
Among persons living with HIV disease that were reported with only a hepatitis B infection in 2016, the greatest proportion were residing in the St. Louis HIV Care Region (60%) at the time of the hepatitis diagnosis (Figure 38). Among HIV-positive persons reported with only a hepatitis C infection in 2016, the greatest proportion were residing in the St. Louis HIV Care Region (43%) at the time of the hepatitis diagnosis. The proportion of HIV-positive persons reported with only a hepatitis C infection in the Outstate regions increased from 22% in 2015 to 33% in 2016.

Figure 39. HIV and hepatitis co-infections by HIV exposure category and type of co-infection, Missouri, 2016



Among persons living with HIV disease and reported with only a hepatitis B infection in 2016, 53% were among MSM (Figure 39). Among hepatitis C co-infection cases, 41% were attributed to MSM, and 26% were attributed to IDU. There were no persons living with HIV disease who were co-infected with both hepatitis B and C in 2016.

Figure 40. HIV and TB disease co-infections by sex, by race, Missouri, 2016



Among the 12,606 persons living with HIV disease, two were reported to be diagnosed with TB disease in 2016. Of those co-infected with TB disease in 2016, both of the co-infections were among persons diagnosed with HIV disease prior to 2016. Both co-infections were reported among persons 45 to 54 years of age at the end of 2016. Both co-infections were among blacks/Africans Americans (Figure 40).

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Key Highlights: What are the HIV service utilization patterns of individuals with HIV disease in Missouri, and what are the number and characteristics of the individuals who know they are HIV positive but who are not in care?

Magnitude of the Problem

- Overall, 67% of Missourians living with HIV disease had their primary care medical needs met (i.e., evidence of a CD4 lymphocyte or viral load test or diagnosis with an opportunistic infection in 2016).
- Persons enrolled in HIV medical case management were significantly more likely to have their primary care medical needs met. Of the 12,606 persons living with HIV disease in Missouri, 5,118 (41%) were enrolled in medical case management at some point in 2016. Ninety percent (90%) of individuals in case management had their primary care medical needs met in 2016.
- Persons living with HIV who were subcategorized as stage 3 (AIDS) cases in 2016 were more likely to have their medical needs met (73%) compared to persons subcategorized as HIV cases (61%). Similar patterns were seen regardless of whether the individuals were enrolled in HIV medical case management.
- Enrollment in HIV medical case management and current diagnostic status (i.e., HIV or stage 3 (AIDS)) were important factors influencing unmet need.

Where

- Overall, the proportion of individuals with a met need was greatest in the Northwest HIV Care Region (75%), and lowest in the Kansas City HIV Care Region (64%).
- Among those enrolled in HIV medical case management, the proportion with a met need ranged from 90% in the Central, St. Louis, and Kansas City HIV Care Regions to 94% in the Southwest HIV Care Region.
- For those not enrolled in HIV medical case management, the proportion with a met need ranged from 46% in the Southwest HIV Care Region to 63% in the Northwest HIV Care Region.

Who

Sex

- Overall, there were no differences observed in unmet need by sex, after controlling for factors such as enrollment in HIV medical case management, and current diagnostic status (i.e., HIV or stage 3 (AIDS)).

Race/Ethnicity

- Unmet need tended to be greater among populations of color, although factors such as case management and diagnostic status influenced the relationship between race and unmet need.
- Among persons diagnosed from 2013 to 2015 who were enrolled in case management, the likelihood of entering care was lower for blacks/African Americans than other races.

Age

- There were differences in unmet need by current age among individuals enrolled in HIV medical case management. Unmet need was greatest among individuals 19 to 24 years of age (19%).
- There were differences in unmet need by current age among individuals not enrolled in HIV medical case management. Unmet need was greatest among individuals 45 to 64 years of age (50%).

Exposure Category

- Unmet need by exposure category varied depending upon enrollment in medical case management and current diagnosis status. Among those enrolled in case management, unmet need was greatest among IDU (54%).

Table 32. The impact of HIV case management on access to primary medical care, by HIV care region* and race/ethnicity among individuals living with HIV disease as of December 31, 2016

Region	Total HIV Population		Enrolled in Case Management		Not Enrolled in Case Management	
	Met Need** N (%)	Unmet Need*** N (%)	Met Need** N (%)	Unmet Need*** N (%)	Met Need** N (%)	Unmet Need*** N (%)
St. Louis Region						
White	1,603 (66.0%)	824 (34.0%)	641 (90.9%)	64 (9.1%)	962 (55.9%)	760 (44.1%)
Black/African American	2,408 (70.1%)	1,026 (29.9%)	1,519 (89.3%)	182 (10.7%)	889 (51.3%)	844 (48.7%)
Hispanic	98 (58.0%)	71 (42.0%)	56 (90.3%)	6 (9.7%)	42 (39.3%)	65 (60.7%)
Other/Unknown	85 (73.9%)	30 (26.1%)	51 (91.1%)	5 (8.9%)	34 (57.6%)	25 (42.4%)
Total	4,194 (68.3%)	1,951 (31.7%)	2,267 (89.8%)	257 (10.2%)	1,927 (53.2%)	1,694 (46.8%)
Kansas City Region						
White	1,191 (64.1%)	668 (35.9%)	540 (90.9%)	54 (9.1%)	651 (51.5%)	614 (48.5%)
Black/African American	985 (65.2%)	526 (34.8%)	637 (88.1%)	86 (11.9%)	348 (44.2%)	440 (55.8%)
Hispanic	154 (57.9%)	112 (42.1%)	85 (92.4%)	7 (7.6%)	69 (39.7%)	105 (60.3%)
Other/Unknown	77 (77.8%)	22 (22.2%)	32 (94.1%)	2 (5.9%)	45 (69.2%)	20 (30.8%)
Total	2,407 (64.4%)	1,328 (35.6%)	1,294 (89.7%)	149 (10.3%)	1,113 (48.6%)	1,179 (51.4%)
Northwest Region						
White	79 (78.2%)	22 (21.8%)	39 (95.1%)	2 (4.9%)	40 (66.7%)	20 (33.3%)
Black/African American	27 (73.0%)	10 (27.0%)	13 (86.7%)	2 (13.3%)	14 (63.6%)	8 (36.4%)
Hispanic	1 (20.0%)	4 (80.0%)	0 (N/A)	0 (N/A)	1 (20.0%)	4 (80.0%)
Other/Unknown	1 (100.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (N/A)	0 (N/A)
Total	108 (75.0%)	36 (25.0%)	53 (93.0%)	4 (7.0%)	55 (63.2%)	32 (36.8%)
Central Region						
White	306 (68.8%)	139 (31.2%)	162 (89.5%)	19 (10.5%)	144 (54.5%)	120 (45.5%)
Black/African American	134 (62.9%)	79 (37.1%)	80 (90.9%)	8 (9.1%)	54 (43.2%)	71 (56.8%)
Hispanic	16 (48.5%)	17 (51.5%)	11 (78.6%)	3 (21.4%)	5 (26.3%)	14 (73.7%)
Other/Unknown	5 (62.5%)	3 (37.5%)	3 (100.0%)	0 (0.0%)	2 (40.0%)	3 (60.0%)
Total	461 (66.0%)	238 (34.0%)	256 (89.5%)	30 (10.5%)	205 (49.6%)	208 (50.4%)
Southwest Region						
White	566 (72.5%)	215 (27.5%)	361 (94.8%)	20 (5.2%)	205 (51.3%)	195 (48.8%)
Black/African American	60 (48.0%)	65 (52.0%)	33 (86.8%)	5 (13.2%)	27 (31.0%)	60 (69.0%)
Hispanic	36 (52.2%)	33 (47.8%)	23 (95.8%)	1 (4.2%)	13 (28.9%)	32 (71.1%)
Other/Unknown	17 (63.0%)	10 (37.0%)	11 (91.7%)	1 (8.3%)	6 (40.0%)	9 (60.0%)
Total	679 (67.8%)	323 (32.2%)	428 (94.1%)	27 (5.9%)	251 (45.9%)	296 (54.1%)
Southeast Region						
White	167 (72.0%)	65 (28.0%)	100 (88.5%)	13 (11.5%)	67 (56.3%)	52 (43.7%)
Black/African American	99 (71.2%)	40 (28.8%)	55 (93.2%)	4 (6.8%)	44 (55.0%)	36 (45.0%)
Hispanic	3 (50.0%)	3 (50.0%)	1 (100.0%)	0 (0.0%)	2 (40.0%)	3 (60.0%)
Other/Unknown	4 (80.0%)	1 (20.0%)	1 (100.0%)	0 (0.0%)	3 (75.0%)	1 (25.0%)
Total	273 (71.5%)	109 (28.5%)	157 (90.2%)	17 (9.8%)	116 (55.8%)	92 (44.2%)
Statewide (MO)****						
White	4,034 (67.0%)	1,984 (33.0%)	1,896 (91.4%)	178 (8.6%)	2,138 (54.2%)	1,806 (45.8%)
Black/African American	3,930 (68.1%)	1,838 (31.9%)	2,438 (89.0%)	301 (11.0%)	1,492 (49.3%)	1,537 (50.7%)
Hispanic	316 (56.2%)	246 (43.8%)	178 (91.3%)	17 (8.7%)	138 (37.6%)	229 (62.4%)
Other/Unknown	192 (74.4%)	66 (25.6%)	102 (92.7%)	8 (7.3%)	90 (60.8%)	58 (39.2%)
Total	8,472 (67.2%)	4,134 (32.8%)	4,614 (90.2%)	504 (9.8%)	3,858 (51.5%)	3,630 (48.5%)

*Includes all individuals still living whose most recent diagnosis (i.e., HIV or stage 3 (AIDS)) occurred in the region. Does not reflect the number of individuals currently living in the region.

**Evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year.

*** No evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year.

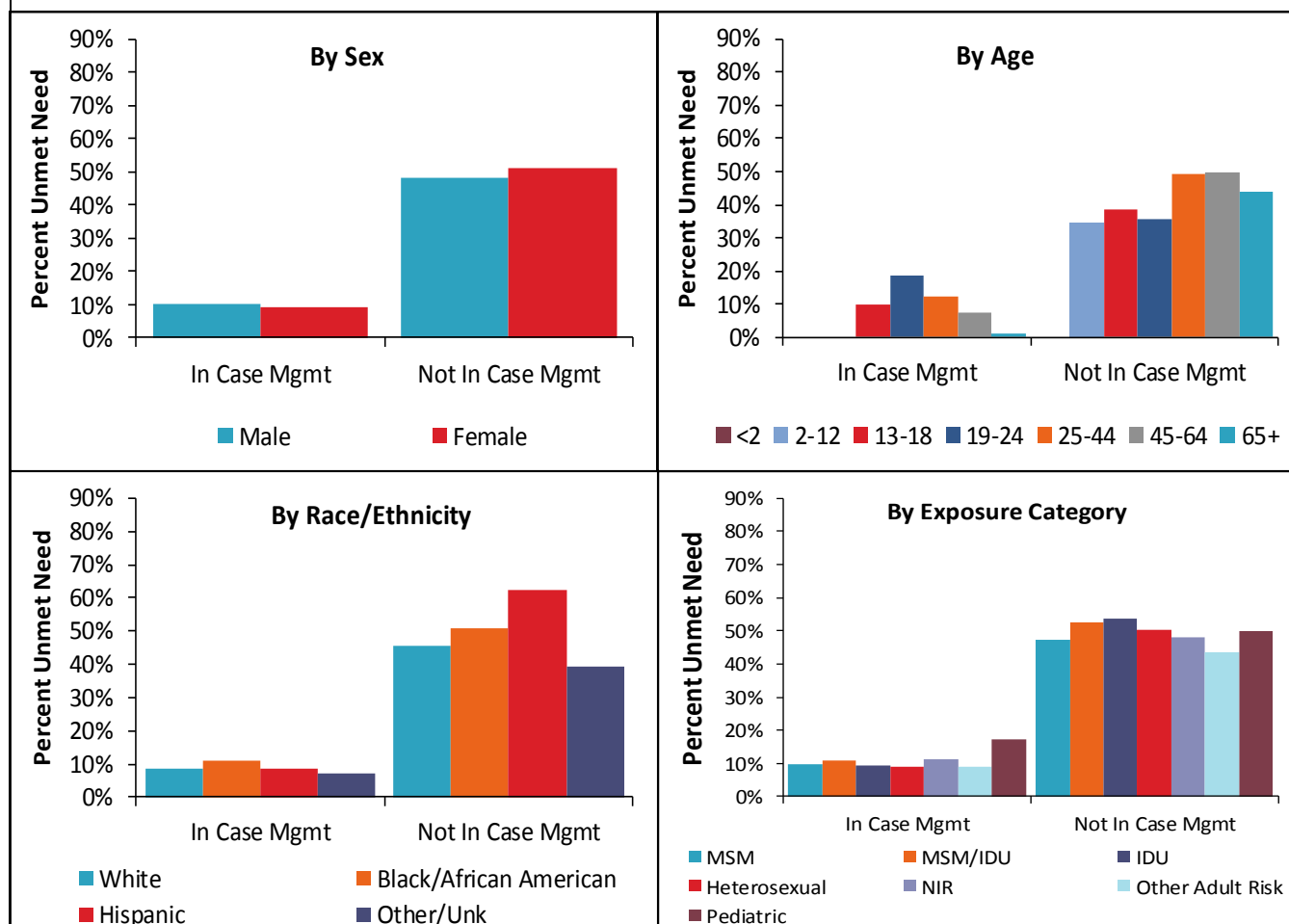
****Statewide figures include living individuals whose most recent diagnosis occurred in a correctional facility or is unknown.

Note: Percentages may not total to 100% due to rounding.

Of the 12,606 persons living with HIV at the end of 2016, 67% had evidence of met primary care medical needs (i.e., met need) in 2016 (Table 32). The primary care medical need was considered to be met if an individual had a CD4 lymphocyte or viral load laboratory test, or diagnosis of an opportunistic infection in 2016 that was reported to DHSS. There were differences in the proportion of individuals with met needs depending on whether the individual was enrolled in HIV medical case management in 2016. A significantly greater proportion of those enrolled in HIV medical case management had a met need (90%) in 2016 compared to those not enrolled (52%). Several factors may contribute to the differences observed. First, case management assists clients to locate and access medical care by referral. Second, case management clients receive health education and counseling to understand the nature of routine medical care. Third, case management assists clients in identifying appropriate payer sources to fund routine medical care. Finally, it is possible that those not enrolled in case management were less likely to be currently living in Missouri, and therefore indicators of primary medical care would not be reported to DHSS. The data were presented based on individuals whose most recent diagnosis occurred in Missouri, not those known to be currently living in Missouri, as accurate data on current residence are difficult to collect.

There were differences in the proportion of individuals with a met need by HIV care region. It is important to note that data presented by HIV care region represent those who currently have a met need that were most recently diagnosed with HIV or stage 3 (AIDS) in the selected HIV care region. It does not necessarily reflect where individuals are currently living and receiving care. Overall, the proportion of individuals with a met need was greatest in the Northwest HIV Care Region (75%), and lowest in the Kansas HIV Care Region (64%). The pattern was slightly different among the regions depending on whether individuals were enrolled in HIV medical case management. For those not enrolled in HIV medical case management, the proportion with a met need ranged from 46% in the Southwest HIV Care Region to 63% in the Northwest HIV Care Region.

There were differences in the proportion of persons with a met need by race/ethnicity. Statewide, met need was lower among Hispanics (56%) compared to all other race/ethnicity groups presented. Within each region and depending on whether the individuals were enrolled in HIV medical case management, the patterns by race/ethnicity varied slightly. Among individuals not enrolled in case management, the proportion of blacks/African Americans with a met need was lower in all HIV care regions compared to whites, and the proportion of Hispanics with a met need was also lower in all HIV care regions compared to whites.

Figure 41. Percent of individuals living with HIV having an unmet* primary medical care need in 2016, by enrollment in HIV case management and selected characteristics

*No evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year.

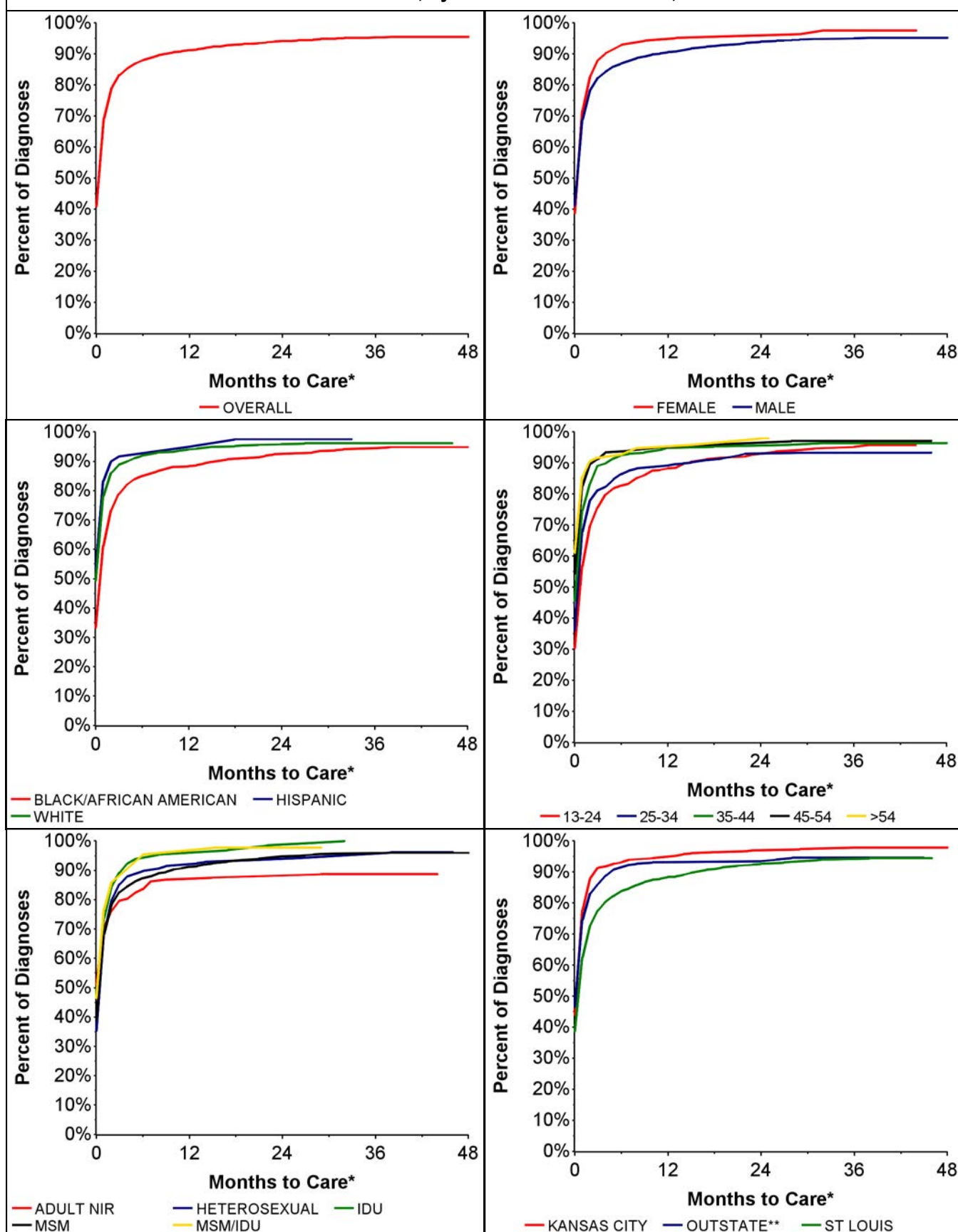
Figure 41 examines the proportion of cases with unmet need depending on whether the individuals were enrolled in HIV medical case management for selected characteristics. There were no differences in the proportion of individuals with unmet needs between the sexes, regardless of whether enrolled in HIV medical case management. There were differences in the proportion of individuals with unmet needs by current age among those not enrolled in case management. Unmet need was greatest among individuals 45 to 64 years of age (50%). Those 2 to 12 years of age had the lowest proportion of unmet need. There were also differences in the proportion of individuals with unmet needs by current age among those enrolled in case management. Unmet need was greatest among 19 to 24 year olds (19%). There were differences in the proportion of individuals with unmet needs by race/ethnicity among those not enrolled in case management and among those enrolled in case management. Among those not enrolled in case management, unmet need was greatest among Hispanics (62%) and lowest among those of other or unknown race (39%) and whites (46%). Among those enrolled in case management, unmet need was greatest among blacks/African Americans (11%). There were differences in the proportion of individuals with unmet needs by exposure category among those not enrolled in case management and among those enrolled in case management. Among those not enrolled in case management, unmet need was greatest among IDU (54%), followed closely by MSM/IDU (53%). The proportion of unmet need was lowest among individuals with a risk other than those presented (44%). Among those enrolled in case management, unmet need was greatest among those with pediatric exposure (17%). There were not significant differences in the proportions of the remaining exposure categories for those not enrolled in case management.

Table 33 examines the proportion of cases reported with unmet need based on current status (i.e., HIV or stage 3 (AIDS)) and selected characteristics. Overall, the proportion of those with an unmet need was greater for those classified as HIV cases compared to stage 3 (AIDS) cases. The same trend was observed regardless of whether individuals were enrolled in HIV medical case management.

	Total Population		Enrolled in Case Management		Not Enrolled in Case Management	
	HIV Cases with Unmet Need* % (N)	Stage 3 (AIDS) Cases with Unmet Need* % (N)	HIV Cases with Unmet Need* % (N)	Stage 3 (AIDS) Cases with Unmet Need* % (N)	HIV Cases with Unmet Need* % (N)	Stage 3 (AIDS) Cases with Unmet Need* % (N)
Sex						
Male	39.8% (2,011)	27.2% (1,460)	13.4% (234)	7.5% (171)	53.8% (1,777)	41.9% (1,289)
Female	36.1% (399)	24.4% (264)	10.8% (54)	7.7% (45)	56.9% (345)	43.6% (219)
Race/Ethnicity						
White	38.0% (1,122)	28.1% (862)	11.4% (106)	6.3% (72)	50.2% (1,016)	41.1% (790)
Black/African American	39.7% (1,113)	24.5% (725)	14.0% (167)	8.7% (134)	58.6% (946)	41.8% (591)
Hispanic	47.2% (128)	40.5% (118)	12.0% (10)	6.3% (7)	62.8% (118)	62.0% (111)
Other/Unknown	37.0% (47)	14.5% (19)	12.2% (5)	4.3% (3)	48.8% (42)	25.8% (16)
Current Age[†]						
<2	-- (0)	0.0% (0)	-- (0)	-- (0)	-- (0)	0.0% (0)
2-12	26.7% (8)	50.0% (1)	0.0% (0)	0.0% (0)	32.0% (8)	100.0% (1)
13-18	40.0% (18)	0.0% (0)	11.1% (1)	0.0% (0)	47.2% (17)	0.0% (0)
19-24	27.6% (108)	23.9% (22)	16.5% (31)	25.0% (15)	37.7% (77)	21.9% (7)
25-44	35.9% (1,016)	26.2% (472)	14.5% (182)	9.7% (88)	53.0% (834)	43.0% (384)
45-64	43.9% (1,125)	27.0% (1,100)	10.0% (74)	6.2% (111)	57.6% (1,051)	43.2% (989)
65+	46.1% (135)	27.9% (129)	0.0% (0)	1.8% (2)	54.7% (135)	36.3% (127)
Exposure Category						
MSM	37.8% (1,466)	27.3% (1,092)	12.8% (180)	7.2% (123)	52.0% (1,286)	42.5% (969)
MSM/IDU	39.0% (94)	27.6% (102)	17.9% (21)	6.0% (11)	58.9% (73)	48.7% (91)
IDU	42.6% (115)	30.0% (124)	9.9% (8)	9.2% (19)	56.6% (107)	50.7% (105)
Heterosexual Contact	38.0% (337)	24.4% (227)	10.8% (42)	7.6% (35)	59.0% (295)	41.2% (192)
No Indicated Risk (NIR)	44.8% (353)	24.1% (161)	13.4% (31)	9.7% (27)	57.9% (322)	34.4% (134)
Other Adult Risk	66.7% (8)	26.3% (10)	100.0% (1)	0.0% (0)	63.6% (7)	35.7% (10)
Pediatric	48.7% (37)	21.6% (8)	27.8% (5)	5.9% (1)	55.2% (32)	35.0% (7)
Total	39.1% (2,410)	26.7% (1,724)	12.8% (288)	7.5% (216)	54.2% (2,122)	42.2% (1,508)

*No evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year.
 **HIV case vs. stage 3 (AIDS) case.
[†]Based on age as of December 31, 2016.
 Note: Rows with the percent marked '-.-' indicates that there were no living persons in the selected category.

Figure 42. Length of time in months to enter care* after initial HIV diagnosis among persons diagnosed between 2013 and 2015, by selected characteristics, Missouri



*Defined as first reported CD4 lymphocyte or viral load lab result reported to DHSS.

**Outstate includes the Central, Northwest, Southeast, and Southwest HIV Care Regions.

Source: eHARS

Figure 42 examines the length of time until first entry into care among persons newly diagnosed with HIV disease between 2013 and 2015. Entry into care was measured as the receipt of a CD4 lymphocyte or viral load laboratory result by DHSS. Overall, 91% of persons recently diagnosed had entered care by one year after diagnosis. Within four years of initial diagnosis, 96% had entered care. There was a difference in the proportion of new diagnoses entering care between males and females. Among females, 95% entered care within 12 months of diagnosis while only 90% of males entered care within 12 months of diagnosis. There were differences in the proportion of new diagnoses entering care by race/ethnicity. Over time, a significantly lower proportion of blacks/African Americans entered care compared to whites and Hispanics. At one year after diagnosis, only 88% of blacks/African Americans had entered care, compared to 95% of Hispanics and 94% of whites. There were differences in the proportion of new diagnoses entering care by age at diagnosis. Of persons diagnosed between the ages of 13 and 24, only 88% entered care within one year of diagnosis, compared to 95% of persons 55 years of age or older at the time of diagnosis. The proportion of individuals who entered care within one year of diagnosis increased as the age increased. There were differences over time in likelihood to enter care by exposure category. Among individuals with no identified risk, only 87% entered care within one year of diagnosis, compared to 95% of IDU. Among IDU, 100% entered care within 32 months of diagnosis. Differences in entry to care following diagnosis varied by HIV region of diagnosis. At one year after diagnosis, 95% of persons diagnosed in the Kansas City HIV Care Region, 93% of persons diagnosed in Outstate, and 88% of persons diagnosed in the St. Louis HIV Care Region entered care. Entry into care remained lower among those recently diagnosed in the St. Louis HIV Care Region over time. These data can be used to target populations for outreach efforts to assist with entry into HIV medical care among persons recently diagnosed.

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Glossary

Case rate

The frequency of a defined event in a specified population for a given time period, usually expressed as the number of cases per 100,000 people in a population. Case rate is calculated by dividing the number of cases in the population of interest by the total number of people in that population and then multiplying by 100,000 to get the rate per 100,000.

Case definition for stage 3 (AIDS)

All HIV-infected people six years of age and older who have fewer than 200 CD4+ T cells per cubic millimeter of blood, all HIV-infected people between the ages of one and five who have fewer than 500 CD4+ T cells per cubic millimeter of blood, and HIV-infected individuals under the age of one who have less than 750 CD4+ T cells per cubic millimeter of blood (healthy adults usually have 800 to 1,200, with 1,000 being the average). In addition, the definition includes 26 clinical conditions that affect people with advanced HIV disease. Most of these conditions are opportunistic infections that generally do not affect healthy people. For additional information, visit http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6303a1.htm?s_cid=rr6303a1_e.

CD4+ T cell

A white blood cell with CD4 molecules on its surface. These cells play an important role in the human immune system. Sometimes referred to as “helper” cells, they orchestrate the body's response to certain microorganisms such as viruses. HIV virus particles attack and utilize these cells to multiply.

Cumulative number of cases

The number of all cases diagnosed with a particular condition, including living and deceased individuals in a specified area.

Date of diagnosis

The date a laboratory makes a diagnosis based on the chemical analysis of a specimen.

Epidemic

The occurrence in a community or region of cases of an illness, specified health-related behavior, or other health-related events clearly in excess of normal expectancy.

Highly active antiretroviral therapy (HAART)

A treatment protocol using a combination of antiretroviral drugs to suppress the HIV virus. These drugs consist of five basic classes depending on their method of suppression: reverse transcriptase (RT) inhibitors, protease inhibitors (PI), fusion inhibitors, entry inhibitors, and integrase inhibitors.

HIV case

An individual who has been infected with the human immunodeficiency virus (HIV) that is in the early stages of the disease process and has not met the case definition for stage 3 (AIDS).

HIV disease case

All individuals who have been infected with the human immunodeficiency virus (HIV). Cases can be sub-classified into either HIV cases or stage 3 (AIDS) cases.

Incidence

The number of new cases of a specified condition diagnosed within a given time. The calendar year is used in the *Profiles* to calculate incidence.

Incidence rate

The number of new cases diagnosed in a specified population for a given time period, usually expressed as the number of cases per 100,000 people in a population. Incidence rate is calculated by dividing the number of new cases in the population of interest by the total number of people in that population and then multiplying by 100,000 to get the rate per 100,000.

Modes of transmission

Also referred to as **exposure categories**, this term refers to the way in which an individual acquired the HIV virus. The most common modes of transmission are: men who have sex with men (MSM), heterosexual contact, injection drug use (IDU), men who have sex with men and practice injection drug use (MSM/IDU), hemophilia/coagulation disorder, and blood transfusion or tissue recipients.

Sexually Transmitted Infections

Sexually transmitted infections (STIs), commonly called **sexually transmitted diseases (STDs)** and once called venereal diseases, are among the most common infectious diseases in the United States today. They are a group of infections that are predominantly transmitted through sexual activity.

Sexually Transmitted Infections* and the Organisms Responsible

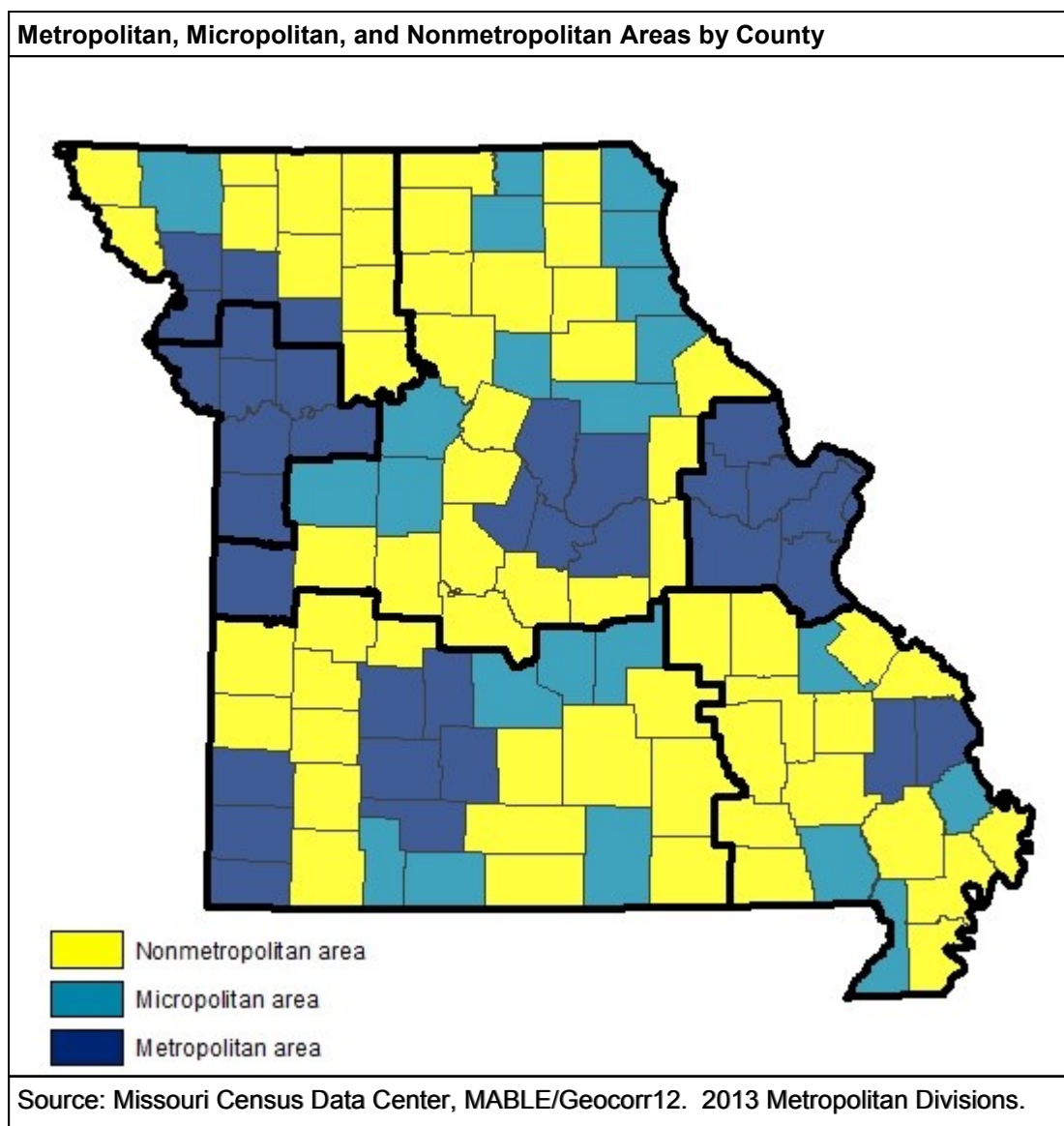
Disease	Organism
Acquired Immunodeficiency Syndrome (AIDS)	Human immunodeficiency virus
Chlamydial infections	Chlamydia trachomatis
Gonorrhea	Neisseria gonorrhoeae
Syphilis	Treponema pallidum

*Only includes infections detailed in the *Profiles*.

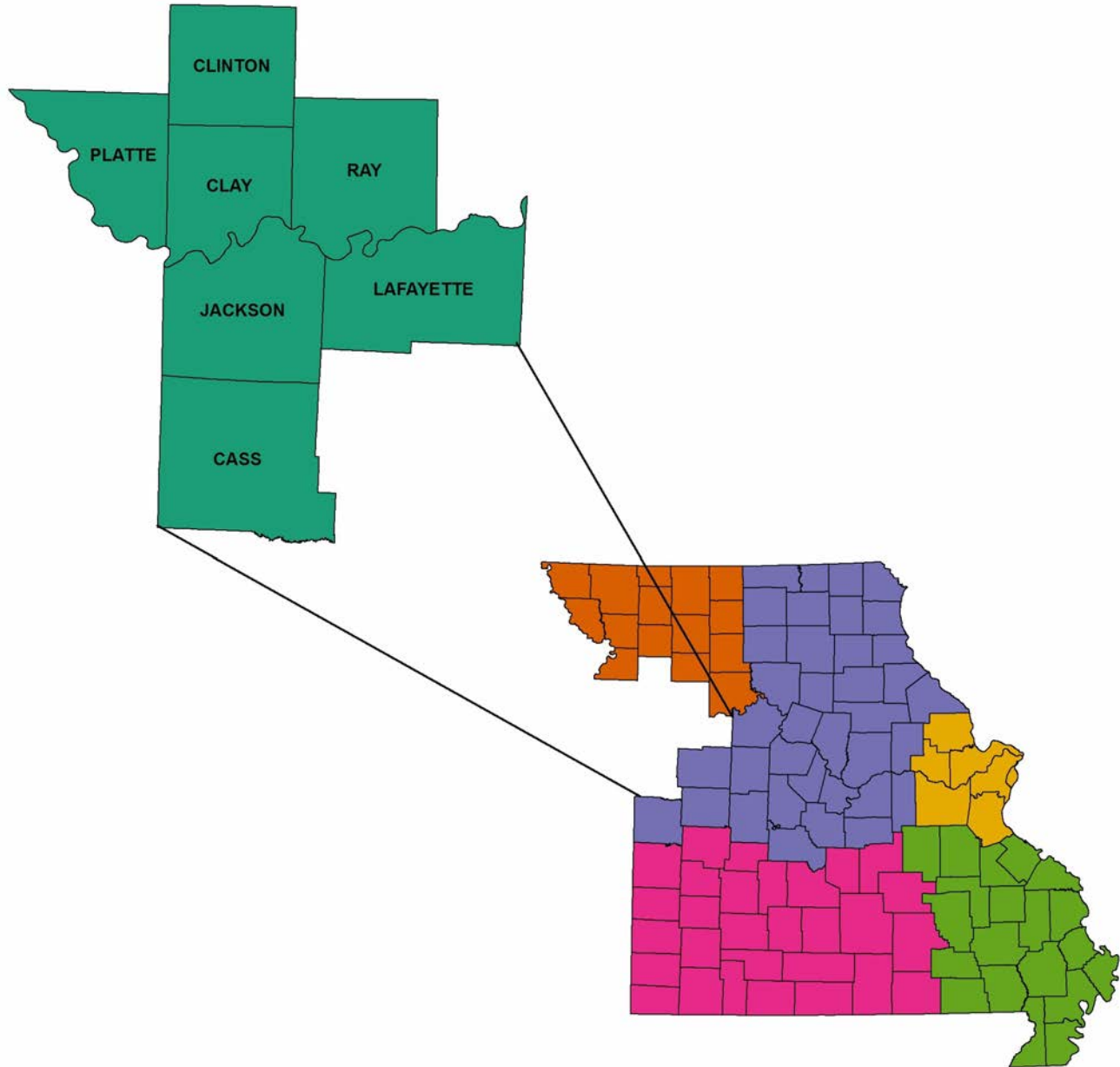
Stage 3 (AIDS) case

An individual who has been infected with human immunodeficiency virus (HIV) that is in the later stages of the disease process and has met the case definition for acquired immunodeficiency syndrome (AIDS).

Appendix



KANSAS CITY HIV CARE REGION



Population Counts, Kansas City HIV Care Region, 2015

County	White		Black/African American		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races/Other Race		Total
Cass County	89,772	88.4%	3,928	3.9%	4,422	4.4%	860	0.8%	545	0.5%	2,076	2.0%	101,603
Clay County	193,201	82.0%	14,027	6.0%	15,823	6.7%	6,125	2.6%	1,109	0.5%	5,352	2.3%	235,637
Clinton County	19,316	93.7%	299	1.5%	422	2.0%	102	0.5%	121	0.6%	349	1.7%	20,609
Jackson County	430,690	62.6%	160,862	23.4%	61,466	8.9%	14,073	2.0%	2,662	0.4%	17,870	2.6%	687,623
Lafayette County	30,112	92.1%	754	2.3%	898	2.7%	182	0.6%	140	0.4%	615	1.9%	32,701
Platte County	78,885	82.1%	6,139	6.4%	5,574	5.8%	2,871	3.0%	410	0.4%	2,217	2.3%	96,096
Ray County	21,377	93.7%	296	1.3%	567	2.5%	86	0.4%	137	0.6%	347	1.5%	22,810
Region Total	863,353	72.1%	186,305	15.6%	89,172	7.4%	24,299	2.0%	5,124	0.4%	28,826	2.4%	1,197,079

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Figure 1. HIV disease cases (living and deceased), by current HIV vs. stage 3 (AIDS) status, Kansas City HIV Care Region, 1982-2016

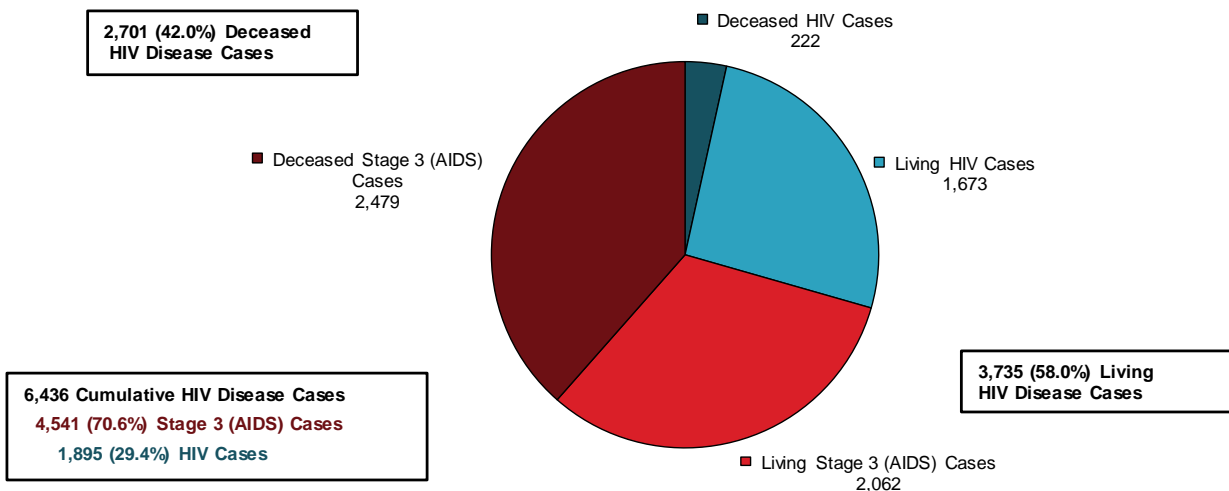
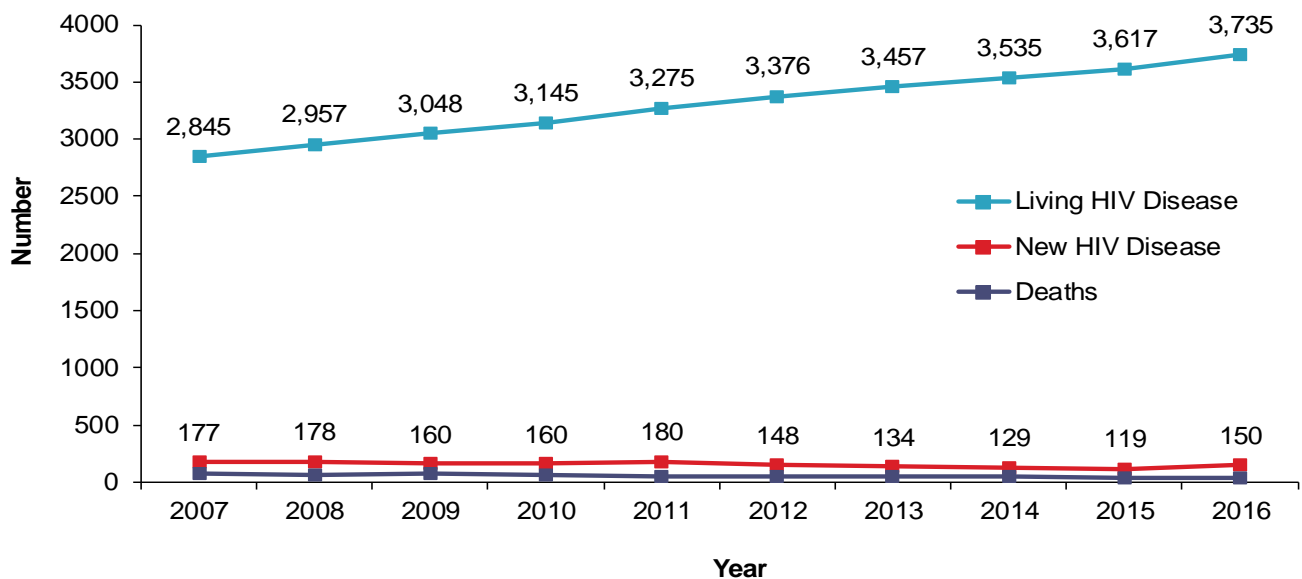


Figure 2. Living and new HIV disease cases and deaths, by year*, Kansas City HIV Care Region, 2007-2016

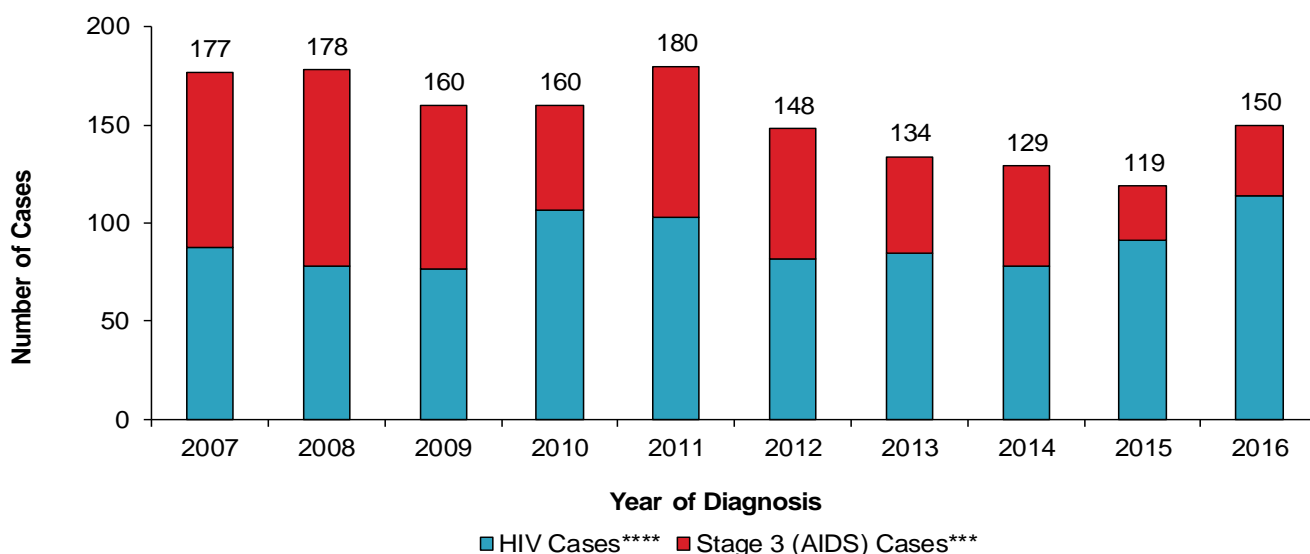


*Living HIV disease cases represent the number of individuals living with HIV disease at the end of the year. New HIV disease cases represent the number of individuals newly diagnosed in the year. HIV disease deaths represent the number of individuals that died in the year.

From 1982 to 2016, a total of 6,436 HIV disease cases were diagnosed in the Kansas City HIV Care Region and reported to DHSS (Figure 1). Of the cumulative cases reported, 58% were still presumed to be living with HIV disease at the end of 2016. Among those living with HIV disease, 1,673 were classified as HIV cases at the end of 2016 and 2,062 were classified as stage 3 (AIDS) cases.

At the end of 2016, there were 3,735 persons living with HIV disease whose most recent diagnosis occurred in the Kansas City HIV Care Region (Figure 2). The number of people living with HIV disease increased every year. There were 150 new HIV disease diagnoses in 2016. The number of new diagnoses was generally stable with slight fluctuations between 2007 and 2011, with a gradual decrease from 2011 through 2015, followed by a 26% increase in reported cases from 2015 to 2016. The number of deaths among persons with HIV disease remained generally stable.

Figure 3. HIV disease cases, by current status* and year of diagnosis, Kansas City HIV Care Region, 2007-2016**



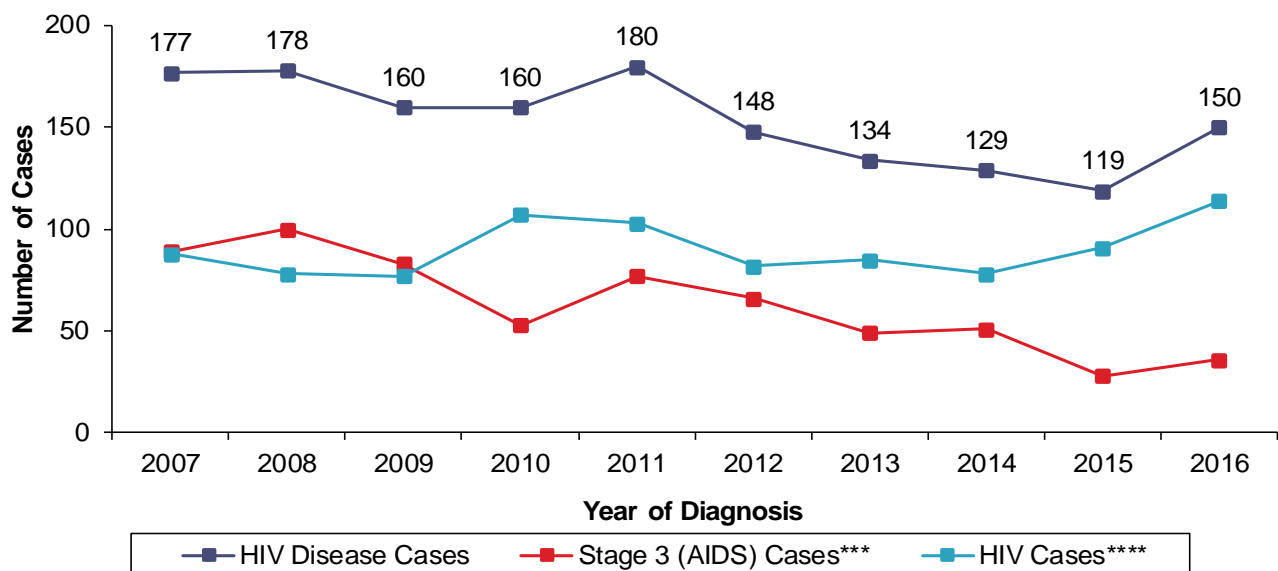
*HIV case vs. stage 3 (AIDS) case.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, Kansas City HIV Care Region, 2007-2016**



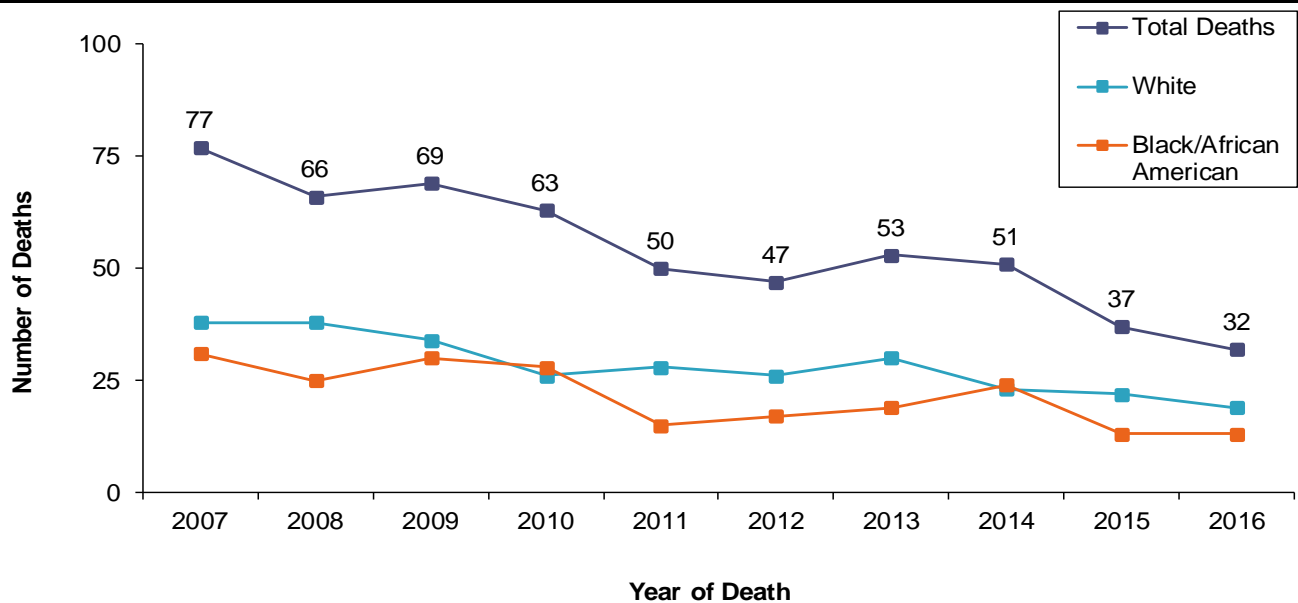
*HIV case vs. stage 3 (AIDS) case.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

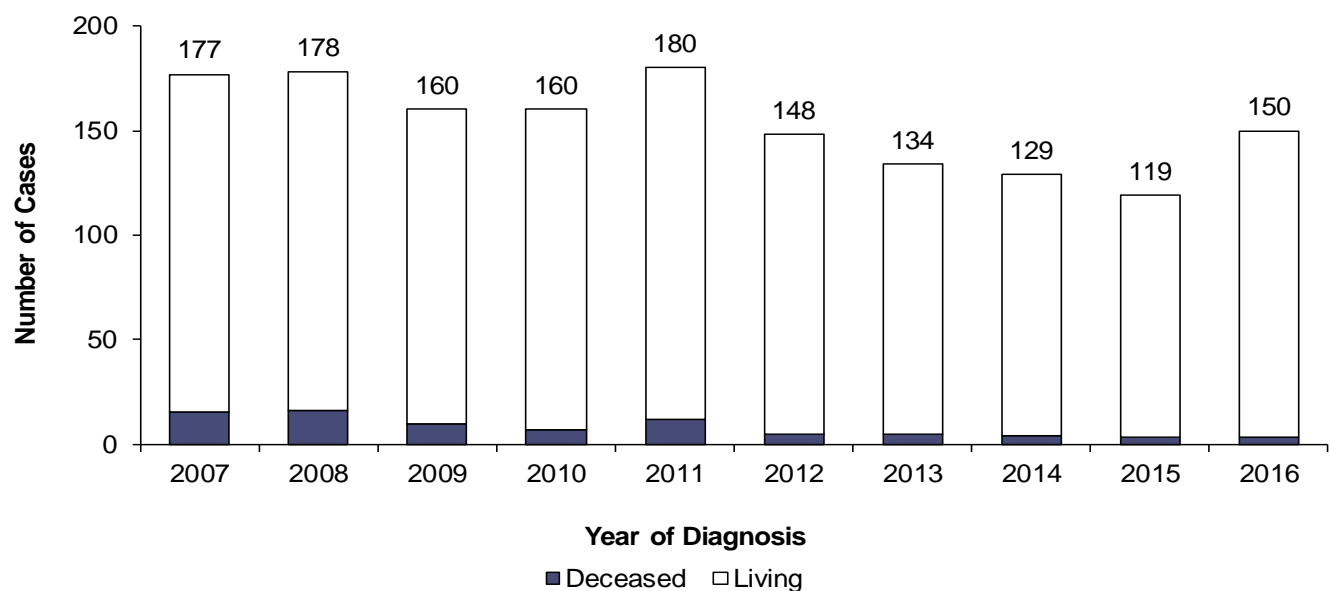
****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

The number of new diagnoses remained generally stable with no sustained upward or downward trend between 2007 and 2011. The number of new diagnoses decreased between 2011 and 2015, and then increased 26% from 2015 to 2016. Differences in the number of persons sub-classified as stage 3 (AIDS) cases each year are due to the progression of the disease over time.

Figure 5. HIV disease deaths*, by selected race and year of death, Kansas City HIV Care Region, 2007-2016†

*Includes deaths that have occurred among those diagnosed with HIV disease in the Kansas City HIV Care Region.

†Only includes deaths through December 31, 2016, and reported by February 28, 2017.

Figure 6. Persons diagnosed with HIV disease, by current vital status* and year of diagnosis, Kansas City HIV Care Region, 2007-2016**

*Vital status on December 31, 2016.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

The number of deaths among persons with HIV disease generally decreased from 2007 to 2012 (Figure 5). The number of deaths among persons with HIV increased slightly from 2012 to 2013 and then decreased through 2016. The lower number of deaths in more recent years was likely related in part to delays in death reporting.

Of the 177 persons diagnosed with HIV disease in 2007, 15 (9%) were deceased by the end of 2016 (Figure 6). Among the 150 persons first diagnosed in 2016, three (2%) were deceased at the end of 2016. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease.

Table 1. Living[†] HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Kansas City HIV Care Region, 2016									
	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>
Sex									
Male	1,413	84.5%	242.2	1,747	84.7%	299.5	3,160	84.6%	541.7
Female	260	15.5%	42.4	315	15.3%	51.3	575	15.4%	93.7
Total	1,673	100.0%	139.8	2,062	100.0%	172.3	3,735	100.0%	312.0
Race/Ethnicity									
White	822	49.1%	95.2	1,037	50.3%	120.1	1,859	49.8%	215.3
Black/African American	692	41.4%	371.4	819	39.7%	439.6	1,511	40.5%	811.0
Hispanic	117	7.0%	131.2	149	7.2%	167.1	266	7.1%	298.3
Asian/Pacific Islander	18	1.1%	74.1	17	0.8%	70.0	35	0.9%	144.0
American Indian/Alaskan Native	5	0.3%	97.6	2	0.1%	39.0	7	0.2%	136.6
Two or More Races/Unknown	19	1.1%	--	38	1.8%	--	57	1.5%	--
Total	1,673	100.0%	139.8	2,062	100.0%	172.3	3,735	100.0%	312.0
Race/Ethnicity-Males									
White Male	752	53.2%	178.1	954	54.6%	226.0	1,706	54.0%	404.1
Black/African American Male	524	37.1%	598.1	618	35.4%	705.4	1,142	36.1%	1303.5
Hispanic Male	103	7.3%	227.4	129	7.4%	284.8	232	7.3%	512.1
Asian/Pacific Islander Male	15	1.1%	129.0	11	0.6%	94.6	26	0.8%	223.6
American Indian/Alaskan Native Male	5	0.4%	198.6	2	0.1%	79.5	7	0.2%	278.1
Two or More Races/Unknown Male	14	1.0%	--	33	1.9%	--	47	1.5%	--
Total	1,413	100.0%	242.2	1,747	100.0%	299.5	3,160	100.0%	541.7
Race/Ethnicity-Females									
White Female	70	26.9%	15.9	83	26.3%	18.8	153	26.6%	34.7
Black/African American Female	168	64.6%	170.2	201	63.8%	203.7	369	64.2%	373.9
Hispanic Female	14	5.4%	31.9	20	6.3%	45.6	34	5.9%	77.5
Asian/Pacific Islander Female	3	1.2%	23.7	6	1.9%	47.4	9	1.6%	71.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	5	1.9%	--	5	1.6%	--	10	1.7%	--
Total	260	100.0%	42.4	315	100.0%	51.3	575	100.0%	93.7
Current Age[‡]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	6	0.4%	3.4	0	0.0%	0.0	6	0.2%	3.4
13-18	9	0.5%	9.5	0	0.0%	0.0	9	0.2%	9.5
19-24	95	5.7%	110.0	23	1.1%	26.6	118	3.2%	136.7
25-44	757	45.2%	233.6	548	26.6%	169.1	1,305	34.9%	402.8
45-64	736	44.0%	233.6	1,351	65.5%	428.8	2,087	55.9%	662.4
65+	70	4.2%	41.5	140	6.8%	83.1	210	5.6%	124.6
Total	1,673	100.0%	139.8	2,062	100.0%	172.3	3,735	100.0%	312.0
[†] Includes persons diagnosed with HIV disease in the Kansas City HIV Care Region who are currently living, regardless of current residence. *Cases which remained HIV cases at the end of 2016. **Cases classified as stage 3 (AIDS) by December 31, 2016. ***The sum of HIV cases and stage 3 (AIDS) cases. ****Per 100,000 population based on 2015 DHSS estimates. [‡] Based on age as of December 31, 2016. Note: Percentages may not total 100% due to rounding.									

Table 2. Diagnosed HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Kansas City HIV Care Region, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	97	85.1%	16.6	27	75.0%	4.6	124	82.7%	21.3
Female	17	14.9%	2.8	9	25.0%	1.5	26	17.3%	4.2
Total	114	100.0%	9.5	36	100.0%	3.0	150	100.0%	12.5
Race/Ethnicity									
White	47	41.2%	5.4	16	44.4%	1.9	63	42.0%	7.3
Black/African American	47	41.2%	25.2	15	41.7%	8.1	62	41.3%	33.3
Hispanic	18	15.8%	20.2	5	13.9%	5.6	23	15.3%	25.8
Asian/Pacific Islander	1	0.9%	4.1	0	0.0%	0.0	1	0.7%	4.1
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	1	0.9%	--	0	0.0%	--	1	0.7%	--
Total	114	100.0%	9.5	36	100.0%	3.0	150	100.0%	12.5
Race/Ethnicity-Males									
White Male	44	45.4%	10.4	15	55.6%	3.6	59	47.6%	14.0
Black/African American Male	35	36.1%	39.9	9	33.3%	10.3	44	35.5%	50.2
Hispanic Male	17	17.5%	37.5	3	11.1%	6.6	20	16.1%	44.1
Asian/Pacific Islander Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Male	1	1.0%	39.7	0	0.0%	0.0	1	0.8%	39.7
Two or More Races/Unknown Male	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	97	100.0%	16.6	27	100.0%	4.6	124	100.0%	21.3
Race/Ethnicity-Females									
White Female	3	17.6%	0.7	1	11.1%	0.2	4	15.4%	0.9
Black/African American Female	12	70.6%	12.2	6	66.7%	6.1	18	69.2%	18.2
Hispanic Female	1	5.9%	2.3	2	22.2%	4.6	3	11.5%	6.8
Asian/Pacific Islander Female	1	5.9%	7.9	0	0.0%	0.0	1	3.8%	7.9
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	17	100.0%	2.8	9	100.0%	1.5	26	100.0%	4.2
Current Age[†]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	4	3.5%	4.2	0	0.0%	0.0	4	2.7%	4.2
19-24	32	28.1%	37.1	3	8.3%	3.5	35	23.3%	40.5
25-44	61	53.5%	18.8	15	41.7%	4.6	76	50.7%	23.5
45-64	15	13.2%	4.8	18	50.0%	5.7	33	22.0%	10.5
65+	2	1.8%	1.2	0	0.0%	0.0	2	1.3%	1.2
Total	114	100.0%	9.5	36	100.0%	3.0	150	100.0%	12.5

*HIV cases diagnosed during 2016 which remained HIV cases at the end of the year.

**Stage 3 (AIDS) cases initially diagnosed in 2016.

***The sum of newly diagnosed HIV cases and newly diagnosed stage 3 (AIDS) cases. Does not include cases diagnosed prior to 2016 with HIV which progressed to stage 3 (AIDS) in 2016.

****Per 100,000 population based on 2015 DHSS estimates.

†Based on age as of December 31, 2016.

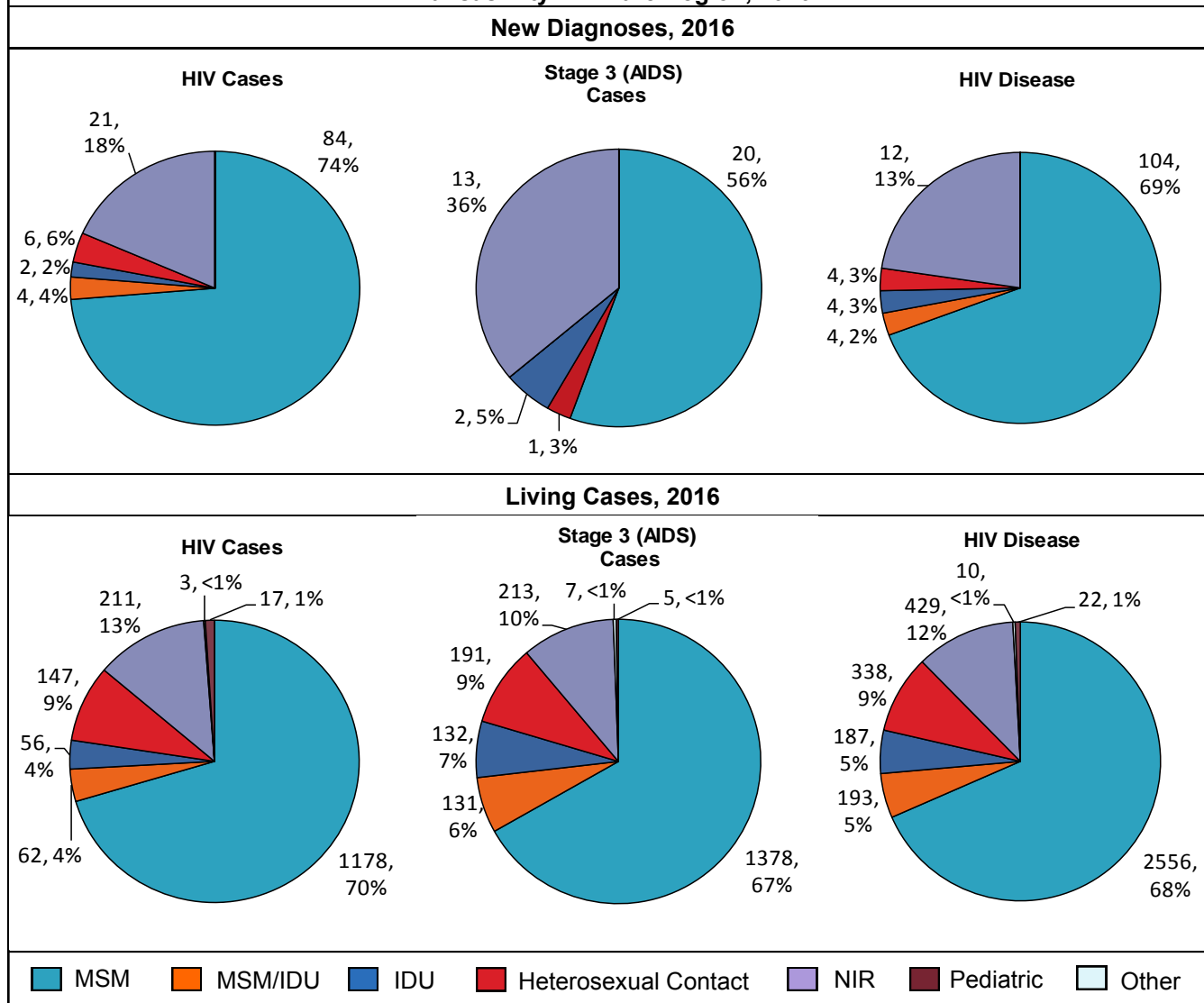
Note: Percentages may not total 100% due to rounding.

Epi Profiles Summary: Kansas City HIV Care Region

Of the 3,735 persons living with HIV disease at the end of 2016, 85% were males (Table 1). The rate of those living with HIV disease among males was 5.8 times as high as the rate among females. Although whites represented the largest proportion of living HIV disease cases (50%), the rate of those living with HIV disease among blacks/African Americans was 3.8 times as high as the rate among whites. The rate among Hispanics was 1.4 times as high as the rate among whites. Among males, the rate of persons living with HIV disease among blacks/African Americans was 3.2 times as high as the rate among whites, and the rate among Hispanics was 1.3 times as high as the rate among whites. Among females, the rate of those living with HIV disease among blacks/African Americans was 10.8 times as high as the rate among whites, and 2.2 times as high among Hispanics compared to whites.

Of the 150 persons newly diagnosed with HIV disease in 2016, 24% were classified as AIDS cases by the end of 2016 (Table 2). The rate of new HIV disease diagnoses was 5.1 times as high among males compared to females. The rate of new HIV disease cases among blacks/African Americans was 4.6 times as high as the rate among whites, and 3.5 times as high among Hispanics compared to whites.

Figure 7. Diagnosed and living HIV, stage 3 (AIDS), and HIV disease cases, by exposure category, Kansas City HIV Care Region, 2016



Among all categories, the majority of cases were attributed to MSM (Figure 7). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and stage 3 (AIDS) cases and rates, by geographic area, Kansas City HIV Care Region, 2016

Geographic Area	HIV Cases						Stage 3 (AIDS) Cases					
	Diagnosed 2016*			Living			Diagnosed 2016**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Kansas City	95	83.3%	20.0	1,332	79.6%	280.2	29	80.6%	6.1	1,668	80.9%	350.9
Jackson County†	15	13.2%	4.0	208	12.4%	54.8	4	11.1%	1.1	258	12.5%	68.0
Clay County†	2	1.8%	1.7	63	3.8%	54.7	1	2.8%	0.9	62	3.0%	53.9
Cass County†	1	0.9%	1.0	29	1.7%	28.6	0	0.0%	0.0	40	1.9%	39.4
Platte County†	1	0.9%	2.0	25	1.5%	50.3	1	2.8%	2.0	13	0.6%	26.2
KANSAS CITY HIV CARE REGION TOTAL	114	100.0%	10.2	1,673	100.0%	149.2	36	100.0%	3.2	2,062	100.0%	183.9

*HIV cases diagnosed and reported to DHSS during 2016 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

***Per 100,000 population based on 2015 DHSS estimates.

†Outside the limits of Kansas City.

Note: Percentages may not total 100% due to rounding.

Table 4. Diagnosed HIV cases and rates, by selected race/ethnicity and geographic area, Kansas City HIV Care Region, 2016

Area	White			Black/African American			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
Kansas City	35	36.8%	13.4	42	44.2%	30.1	17	17.9%	36.2	95	100.0%	20.0
Jackson County†	9	60.0%	3.0	4	26.7%	12.0	1	6.7%	3.9	15	100.0%	4.0
Remainder of Region†	3	75.0%	1.3	1	25.0%	8.4	0	0.0%	0.0	4	100.0%	1.5
KANSAS CITY HIV CARE REGION TOTAL	47	41.2%	5.9	47	41.2%	25.4	18	15.8%	20.6	114	100.0%	10.2

*Per 100,000 population based on 2015 DHSS estimates.

**Includes cases in persons whose race/ethnicity is either unknown or not listed.

†Outside the limits of Kansas City.

Note: Row percentages are shown. Percentages may not total 100% due to rounding.

Table 5. Diagnosed stage 3 (AIDS) cases and rates, by selected race/ethnicity and geographic area, Kansas City HIV Care Region, 2016

Area	White			Black/African American			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
Kansas City	10	34.5%	3.8	15	51.7%	10.7	4	13.8%	8.5	29	100.0%	6.1
Jackson County†	4	100.0%	1.3	0	0.0%	0.0	0	0.0%	0.0	4	100.0%	1.1
Remainder of Region†	2	66.7%	0.9	0	0.0%	0.0	1	33.3%	6.9	3	100.0%	1.1
KANSAS CITY HIV CARE REGION TOTAL	16	44.4%	2.0	15	41.7%	8.1	5	13.9%	5.7	36	100.0%	3.2

*Per 100,000 population based on 2015 DHSS estimates.

**Includes cases in persons whose race/ethnicity is either unknown or not listed.

†Outside the limits of Kansas City.

Note: Row percentages are shown. Percentages may not total 100% due to rounding.

The rates of new diagnoses and living cases were highest in Kansas City compared to other areas in the Kansas City HIV Care Region (Table 3).

The highest rates of new HIV case diagnoses among whites, blacks/African Americans, and Hispanics were observed in Kansas City (Table 4). In Kansas City, blacks/African Americans comprised the greatest proportion of new HIV cases. In Jackson County and the remainder of the region, whites comprised the greatest proportion of new HIV cases.

In Kansas City, blacks/African Americans comprised the greatest proportion of new stage 3 (AIDS) case diagnoses (Table 5). In Jackson County and the remainder of the Kansas City HIV Care Region, whites represented the greatest proportion of new stage 3 (AIDS) case diagnoses.

Table 6. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men, by selected race/ethnicity, Kansas City HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	37	44.0%	640	54.3%	11	55.0%	776	56.3%
Black/African American	30	35.7%	423	35.9%	7	35.0%	477	34.6%
Hispanic	16	19.0%	89	7.6%	2	10.0%	89	6.5%
Other/Unknown	1	1.2%	26	2.2%	0	0.0%	36	2.6%
KANSAS CITY HIV CARE REGION TOTAL	84	100.0%	1,178	100.0%	20	100.0%	1,378	100.0%

*Remained HIV cases at the end of the year.
 **Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.
 Note: Percentages may not total 100% due to rounding.

Table 7. Living HIV disease cases in men who have sex with men, by selected race/ethnicity and current age group, Kansas City HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	2	0.2%	0	0.0%	2	0.1%
19-24	21	1.5%	58	6.4%	10	5.6%	91	3.6%
25-44	383	27.0%	427	47.4%	81	45.5%	921	36.0%
45-64	914	64.5%	387	43.0%	79	44.4%	1,408	55.1%
65+	98	6.9%	26	2.9%	8	4.5%	134	5.2%
KANSAS CITY HIV CARE REGION TOTAL	1,416	100.0%	900	100.0%	178	100.0%	2,556	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.
 **Percentage of cases per age group.
 Note: Percentages may not total 100% due to rounding.

Table 8. Living HIV disease cases in men who have sex with men, by selected race/ethnicity and geographic area, Kansas City HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Kansas City	1,084	51.7%	822	39.2%	141	6.7%	2,097	82.0%
Jackson County [†]	202	67.6%	63	21.1%	25	8.4%	299	11.7%
Clay County [†]	69	81.2%	8	9.4%	7	8.2%	85	3.3%
Cass County [†]	31	81.6%	5	13.2%	0	0.0%	38	1.5%
Remaining Counties [†]	30	81.1%	2	5.4%	5	13.5%	37	1.4%
KANSAS CITY HIV CARE REGION TOTAL	1,416	55.4%	900	35.2%	178	7.0%	2,556	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.
 **Percentage of race/ethnicity in each area.
 ***Percentage of cases per area.
[†]Outside the limits of Kansas City.
 Note: Percentages may not total 100% due to rounding.

A total of 104 new HIV disease diagnoses were attributed to MSM in 2016 for the Kansas City HIV Care Region (Table 6). Whites represented the greatest proportion of new HIV cases diagnosed in 2016 among MSM (44%). Whites also represented the greatest proportion of living HIV cases among MSM (54%). Of the newly diagnosed cases among MSM, 19% progressed to stage 3 (AIDS) by the end of 2016.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 7). Among white MSM living with HIV disease, the majority (65%) were between 45-64 years of age at the end of 2016. In contrast, only 43% of black/African American and 44% of Hispanic MSM living with HIV disease were between 45-64 years of age.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM (Table 8). In Kansas City, black/African American MSM comprised a larger proportion of living cases compared to other areas, though whites represented the highest proportion of living cases in all areas.

Table 9. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men and inject drugs, by selected race/ethnicity, Kansas City HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	3	100.0%	45	72.6%	1	100.0%	90	68.7%
Black/African American	0	0.0%	11	17.7%	0	0.0%	30	22.9%
Hispanic	0	0.0%	3	4.8%	0	0.0%	6	4.6%
Other/Unknown	0	0.0%	3	4.8%	0	0.0%	5	3.8%
KANSAS CITY HIV CARE REGION TOTAL	3	100.0%	62	100.0%	1	100.0%	131	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

Note: Percentages may not total 100% due to rounding.

Table 10. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity and current age group, Kansas City HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25-44	29	21.5%	7	17.1%	2	22.2%	44	22.8%
45-64	98	72.6%	33	80.5%	7	77.8%	140	72.5%
65+	8	5.9%	1	2.4%	0	0.0%	9	4.7%
KANSAS CITY HIV CARE REGION TOTAL	135	100.0%	41	100.0%	9	100.0%	193	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 11. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity and geographic area, Kansas City HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Kansas City	94	63.5%	38	25.7%	9	6.1%	148	76.7%
Jackson County†	25	89.3%	3	10.7%	0	0.0%	28	14.5%
Clay County†	6	85.7%	0	0.0%	0	0.0%	7	3.6%
Remaining Counties†	10	100.0%	0	0.0%	0	0.0%	10	5.2%
KANSAS CITY HIV CARE REGION TOTAL	135	69.9%	41	21.2%	9	4.7%	193	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

†Outside the limits of Kansas City.

Note: Percentages may not total 100% due to rounding.

Four new HIV disease diagnoses were attributed to MSM/IDU in 2016 for the Kansas City HIV Care Region (Table 9). There were 193 persons living with HIV disease attributed to MSM/IDU at the end of 2016 in the Kansas City HIV Care Region. Whites represented the largest proportion of both living HIV and stage 3 (AIDS) cases.

Among white, black/African American, and Hispanic MSM/IDU living with HIV disease in the Kansas City HIV Care Region, the majority were between 45 and 64 years of age (Table 10).

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM/IDU (Table 11). In Kansas City, black/African American MSM/IDU comprised a larger proportion of living cases compared to other areas, though whites represented the highest proportion of living cases in all areas.

Table 12. Newly diagnosed and living HIV and stage 3 (AIDS) cases in injection drug users, by selected race/ethnicity and sex, Kansas City HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	16	29.1%	0	0.0%	31	23.5%
Black/African American Male	0	0.0%	12	21.8%	1	50.0%	39	29.5%
Hispanic Male	0	0.0%	1	1.8%	0	0.0%	7	5.3%
White Female	2	100.0%	14	25.5%	0	0.0%	18	13.6%
Black/African American Female	0	0.0%	9	16.4%	1	50.0%	29	22.0%
Hispanic Female	0	0.0%	2	3.6%	0	0.0%	6	4.5%
KANSAS CITY HIV CARE REGION TOTAL[†]	2	100.0%	55	100.0%	2	100.0%	132	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 13. Living HIV disease cases in injecting drug users, by selected race/ethnicity and sex and current age group, Kansas City HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25-44	9	19.1%	6	11.8%	7	21.9%	9	23.7%	36	19.3%
45-64	35	74.5%	39	76.5%	24	75.0%	27	71.1%	137	73.3%
65+	3	6.4%	6	11.8%	1	3.1%	2	5.3%	14	7.5%
KANSAS CITY HIV CARE REGION TOTAL	47	100.0%	51	100.0%	32	100.0%	38	100.0%	187	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 14. Living HIV disease cases in injecting drug users, by selected race/ethnicity and geographic area, Kansas City HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Kansas City	44	30.1%	86	58.9%	13	8.9%	146	78.1%
Jackson County [†]	20	80.0%	2	8.0%	3	12.0%	25	13.4%
Clay County [†]	3	100.0%	0	0.0%	0	0.0%	3	1.6%
Remaining Counties [†]	12	92.3%	1	7.7%	0	0.0%	13	7.0%
KANSAS CITY HIV CARE REGION TOTAL	79	42.2%	89	47.6%	16	8.6%	187	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

†Outside the limits of Kansas City.

Note: Percentages may not total 100% due to rounding.

Four new HIV disease diagnoses were attributed to IDU in 2016 for the Kansas City HIV Care Region (Table 12). There were 187 persons living with HIV disease attributed to IDU at the end of 2016 in the Kansas City HIV Care Region. Among IDU, white males accounted for the largest proportion of living HIV (29%) cases and black/African American males accounted for the largest proportion of living stage 3 (AIDS) (30%) cases.

The majority of living HIV disease cases were between 45 and 64 years of age for all race/ethnicity and sex groups presented among IDU (Table 13).

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for IDU (Table 14). In Kansas City, black/African American IDU comprised the largest proportion of living cases. In contrast, white IDU comprised the largest proportion of living cases in all other areas in the Kansas City HIV Care Region.

Table 15. Newly diagnosed and living HIV and stage 3 (AIDS) cases in heterosexual contacts, by selected race/ethnicity and sex, Kansas City HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	4	2.7%	0	--	5	2.6%
Black/African American Male	0	0.0%	6	4.1%	0	--	16	8.4%
Hispanic Male	0	0.0%	0	0.0%	0	--	6	3.1%
White Female	0	0.0%	41	27.9%	0	--	52	27.2%
Black/African American Female	4	100.0%	84	57.1%	0	--	97	50.8%
Hispanic Female	0	0.0%	7	4.8%	0	--	10	5.2%
KANSAS CITY HIV CARE REGION TOTAL[†]	4	100.0%	147	100.0%	0	--	191	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

[†]Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 16. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex and current age group, Kansas City HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	10	5.5%	10	3.0%
25-44	1	11.1%	5	22.7%	29	31.2%	70	38.7%	115	34.0%
45-64	6	66.7%	16	72.7%	55	59.1%	93	51.4%	191	56.5%
65+	2	22.2%	1	4.5%	9	9.7%	8	4.4%	22	6.5%
KANSAS CITY HIV CARE REGION TOTAL	9	100.0%	22	100.0%	93	100.0%	181	100.0%	338	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 17. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and geographic area, Kansas City HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Kansas City	57	21.3%	190	71.2%	14	5.2%	267	79.0%
Jackson County [†]	23	53.5%	11	25.6%	6	14.0%	43	12.7%
Clay County [†]	7	63.6%	2	18.2%	1	9.1%	11	3.3%
Remaining Counties [†]	15	88.2%	0	0.0%	2	11.8%	17	5.0%
KANSAS CITY HIV CARE REGION TOTAL	102	30.2%	203	60.1%	23	6.8%	338	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

[†]Outside the limits of Kansas City.

Note: Percentages may not total 100% due to rounding.

Four new HIV disease diagnoses were attributed to heterosexual contact in 2016 for the Kansas City HIV Care Region (Table 15). There were 338 persons living with HIV disease attributed to heterosexual contact at the end of 2016. Black/African American females represented the largest proportion of both living HIV (57%) and stage 3 (AIDS) (51%) cases among heterosexual contact cases.

The majority of living HIV disease cases were between 45 and 64 years of age for all race/ethnicity and sex groups presented among heterosexual contact cases (Table 16).

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for heterosexual contact cases (Table 17). In Kansas City, blacks/African Americans represented the majority of heterosexual contact cases, while whites represented the majority of these cases in all other areas.

Table 18. Newly diagnosed and living HIV and stage 3 (AIDS) cases, by exposure category assignment, Kansas City HIV Care Region, 2016

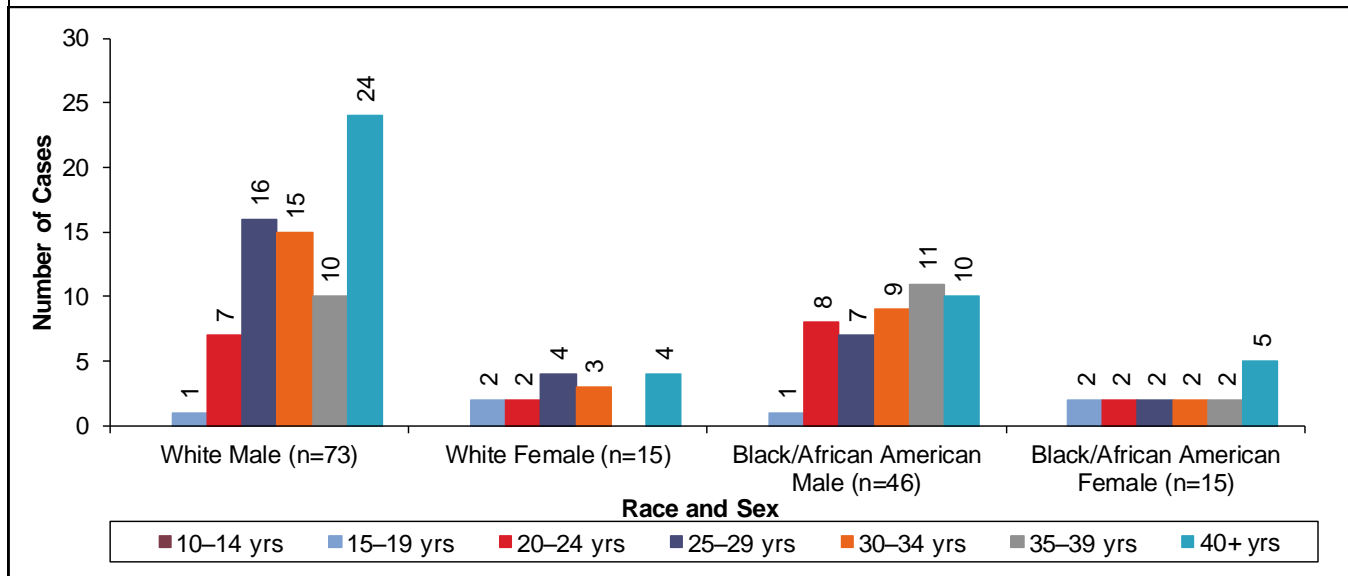
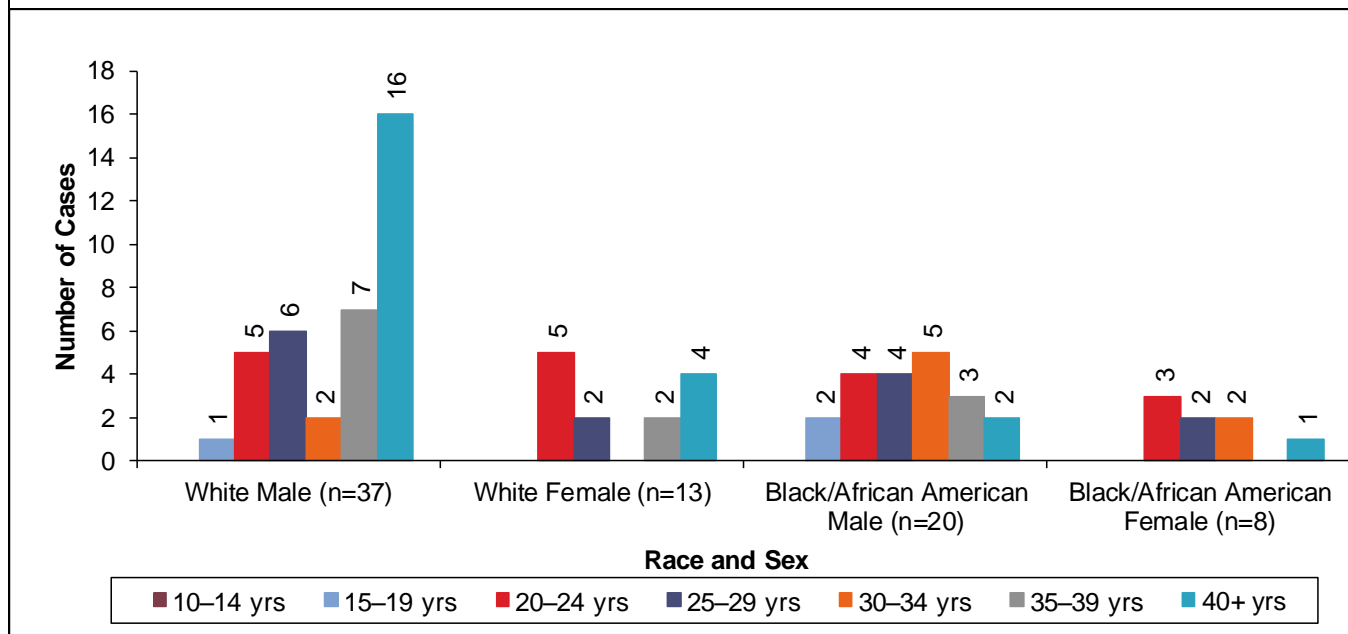
Exposure Category	HIV Cases				Stage 3 (AIDS) Cases			
	2016*		Living		2016**		Living	
Adult/Adolescent								
Men who have sex with men	94	82.5%	1,290	77.9%	25	69.4%	1,482	72.0%
Men who have sex with men and inject drugs	3	2.6%	68	4.1%	1	2.8%	140	6.8%
Injecting drug use	3	2.6%	69	4.2%	7	19.4%	162	7.9%
Heterosexual contact	14	12.3%	226	13.6%	3	8.3%	266	12.9%
Hemophilia/coagulation disorder	0	0.0%	2	0.1%	0	0.0%	5	0.2%
Blood transfusion or tissue recipient	0	0.0%	1	0.1%	0	0.0%	2	0.1%
No indicated risk (NIR)	----	-----	----	-----	----	-----	----	-----
ADULT/ADOLESCENT SUBTOTAL	114	100.0%	1,656	100.0%	36	100.0%	2,057	100.0%
Pediatric (<13 years old)								
PEDIATRIC SUBTOTAL	0	0.0%	17	100.0%	0	0.0%	5	100.0%
TOTAL	114		1,673		36		2,062	

*HIV cases reported during 2016 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

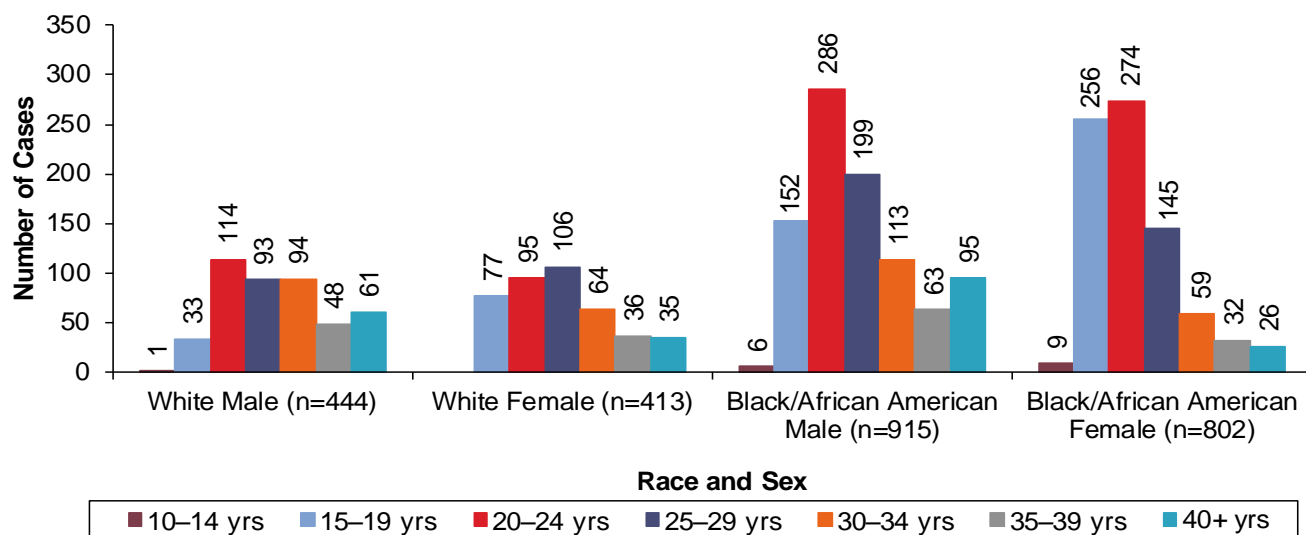
Note: Percentages may not total 100% due to rounding.

The data in Table 18 have been adjusted to proportionately re-distribute individuals with no indicated risk factor to known exposure categories based on sex and race/ethnicity. These data do not reflect the true counts of persons reported in each exposure category. Among both new and living HIV and stage 3 (AIDS) cases, MSM represented the greatest proportion of cases.

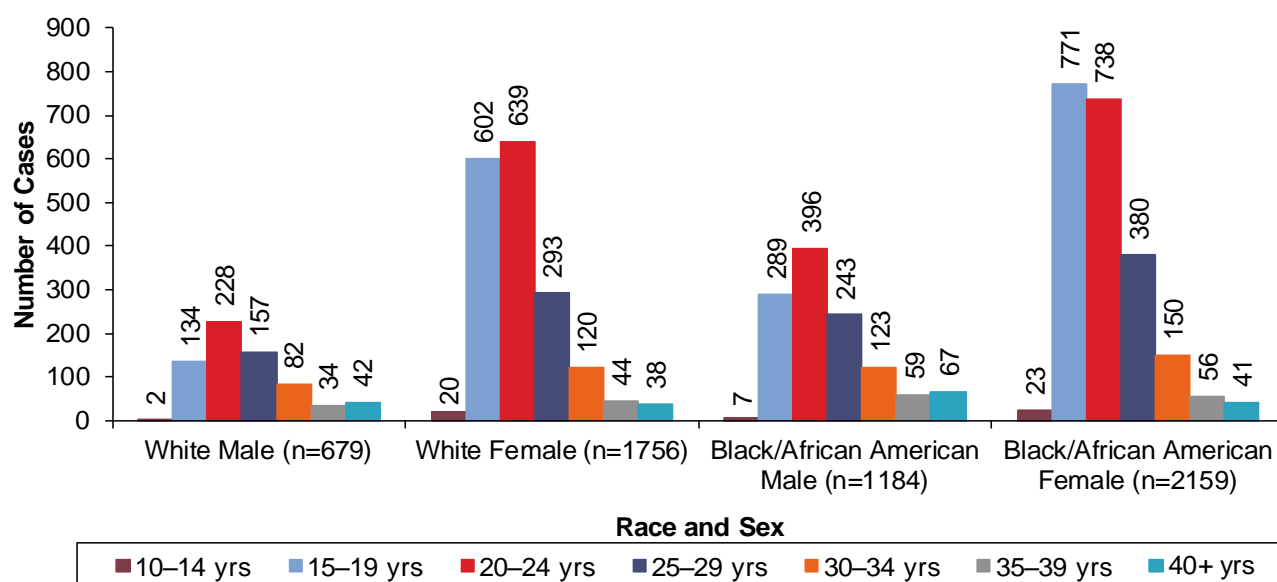
Figure 8. Reported P&S syphilis cases, by race and sex and age group at diagnosis, Kansas City HIV Care Region, 2016**Figure 9. Reported early latent syphilis cases, by race and sex and age group at diagnosis, Kansas City HIV Care Region, 2016**

The largest numbers of P&S syphilis cases reported in 2016 were among white males (73), followed by black/African American males (46), in the Kansas City HIV Care Region (Figure 8). The numbers of reported cases decreased from 2015 to 2016 among all race and sex categories presented except for white males. There were differences in the distribution of reported cases by age at diagnosis among the race and sex categories. Among white males, the largest numbers of cases were reported among individuals 40 or more years of age. Among black/African American males, the largest numbers of cases were reported among individuals 35 to 39 years of age.

The largest numbers of early latent syphilis cases were reported among white males (37), followed by black/African American males (20) (Figure 9). The numbers of reported early latent syphilis cases increased from 2015 to 2016 among all race and sex categories presented except for black/African American females. Among white males, the largest numbers of cases were reported among individuals 40 or more years of age. Among black/African American males, the largest numbers of cases were reported among individuals 30 to 34 years of age.

Figure 10. Reported gonorrhea cases, by race and sex and age group at diagnosis, Kansas City HIV Care Region, 2016

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

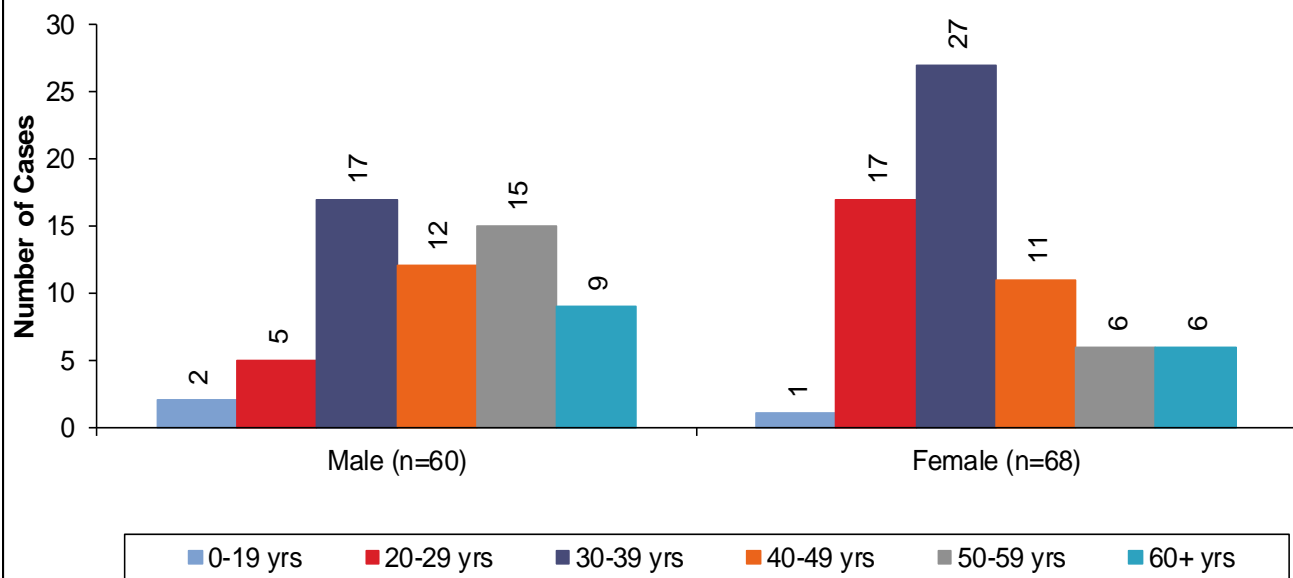
Figure 11. Reported chlamydia cases, by race and sex and age group at diagnosis, Kansas City HIV Care Region, 2016

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest numbers of gonorrhea cases were reported among black/African American males (915), followed by black/African American females (802) (Figure 10). Among white females, the largest numbers of cases were reported among individuals 25 to 29 years of age. For all other race and sex categories presented, individuals 20 to 24 years of age represented the largest numbers of reported cases.

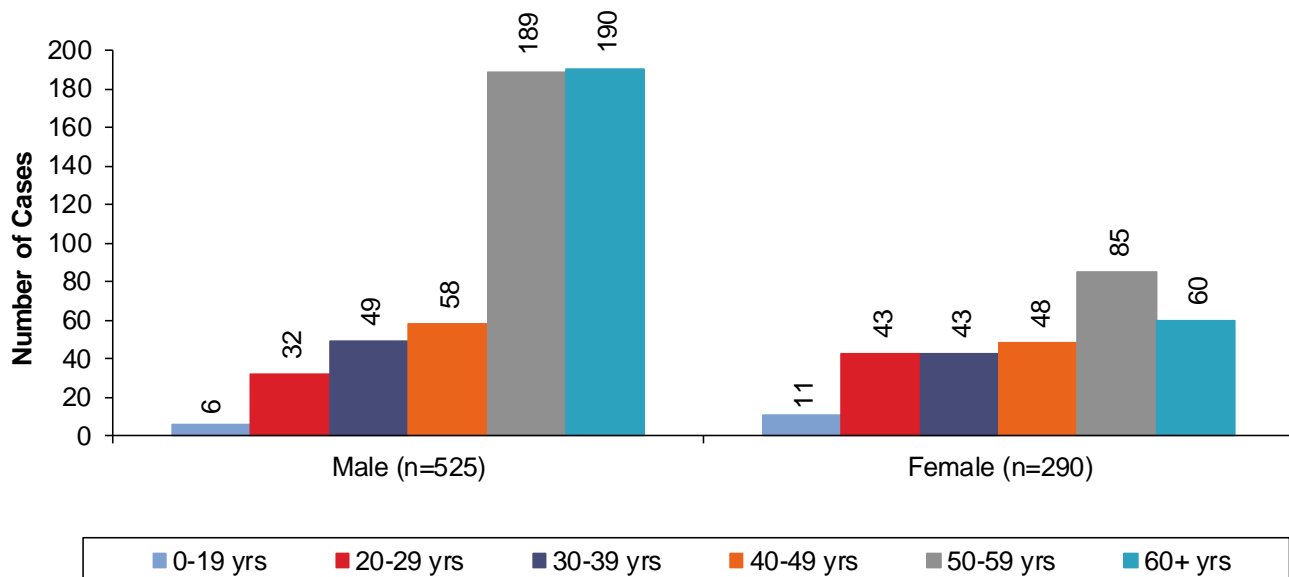
The largest numbers of chlamydia cases were reported among black/African American females (2,159), followed by white females (1,756) (Figure 11). Among black/African American females, the largest numbers of cases were reported among individuals 15 to 19 years of age. For all other race and sex categories presented, individuals 20 to 24 years of age represented the largest numbers of reported cases.

Figure 12. Reported hepatitis B cases, by sex and age group at diagnosis, Kansas City HIV Care Region, 2016



Note: Totals include persons whose age at diagnosis is unknown.

Figure 13. Reported hepatitis C cases, by sex and age group at diagnosis, Kansas City HIV Care Region, 2016



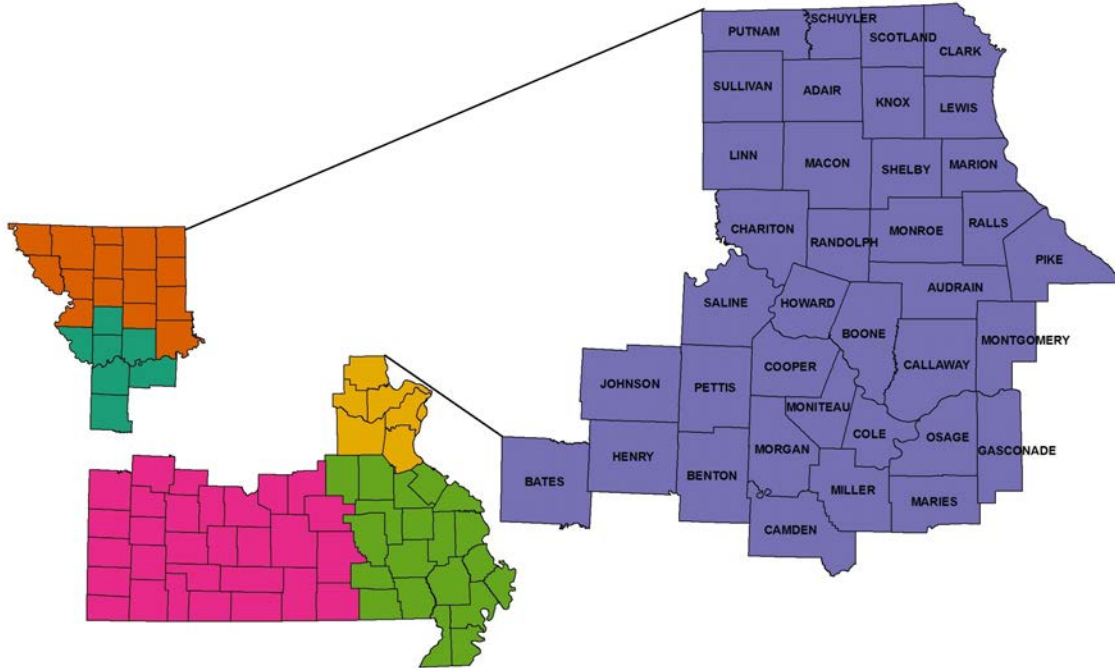
Note: Totals include persons whose age at diagnosis is unknown.

There were 128 reported cases of hepatitis B in the Kansas City HIV Care Region during 2016 (Figure 12). Females represented 53% of reported hepatitis B cases. The largest numbers of cases were among individuals 30 to 39 years old for both males and females.

In 2016, there were 815 hepatitis C cases reported in the Kansas City HIV Care Region (Figure 13). Of the reported hepatitis C cases, 64% were male. There were slight differences in the age at diagnosis of reported hepatitis C cases by sex. A greater proportion of females were diagnosed at less than 50 years of age (50%) compared to males (28%).

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CENTRAL HIV CARE REGION



Population Counts, Central HIV Care Region, 2015

County	White		Black/African American		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races/other		Total
Adair County	23,093	91.0%	491	1.9%	622	2.5%	647	2.5%	70	0.3%	455	1.8%	25,378
Audrain County	22,780	87.3%	1,825	7.0%	769	2.9%	140	0.5%	100	0.4%	482	1.8%	26,096
Bates County	15,532	94.4%	163	1.0%	394	2.4%	38	0.2%	98	0.6%	221	1.3%	16,446
Benton County	17,762	95.1%	97	0.5%	374	2.0%	69	0.4%	116	0.6%	252	1.3%	18,670
Boone County	139,096	79.5%	16,435	9.4%	5,839	3.3%	8,384	4.8%	594	0.3%	4,626	2.6%	174,974
Callaway County	40,388	90.1%	2,031	4.5%	986	2.2%	361	0.8%	201	0.4%	867	1.9%	44,834
Camden County	41,723	94.3%	300	0.7%	1,157	2.6%	275	0.6%	232	0.5%	550	1.2%	44,237
Chariton County	7,217	95.1%	184	2.4%	77	1.0%	13	0.2%	23	0.3%	75	1.0%	7,589
Clark County	6,600	97.0%	23	0.3%	62	0.9%	29	0.4%	10	0.1%	77	1.1%	6,801
Cole County	62,900	82.0%	9,050	11.8%	2,131	2.8%	983	1.3%	232	0.3%	1,424	1.9%	76,720
Cooper County	15,573	88.3%	1,268	7.2%	288	1.6%	119	0.7%	74	0.4%	320	1.8%	17,642
Gasconade County	14,271	96.0%	73	0.5%	217	1.5%	85	0.6%	34	0.2%	178	1.2%	14,858
Henry County	20,337	93.6%	284	1.3%	486	2.2%	109	0.5%	136	0.6%	385	1.8%	21,737
Howard County	9,188	90.6%	545	5.4%	138	1.4%	28	0.3%	56	0.6%	184	1.8%	10,139
Johnson County	46,216	85.7%	2,571	4.8%	2,238	4.1%	1,127	2.1%	281	0.5%	1,518	2.8%	53,951
Knox County	3,764	96.3%	17	0.4%	43	1.1%	11	0.3%	11	0.3%	64	1.6%	3,910
Lewis County	9,450	92.6%	322	3.2%	166	1.6%	46	0.5%	34	0.3%	189	1.9%	10,207
Linn County	11,741	95.4%	110	0.9%	243	2.0%	41	0.3%	33	0.3%	140	1.1%	12,308
Macon County	14,393	93.9%	367	2.4%	205	1.3%	87	0.6%	46	0.3%	237	1.5%	15,335
Maries County	8,580	95.7%	56	0.6%	96	1.1%	54	0.6%	55	0.6%	122	1.4%	8,963
Marion County	26,074	90.3%	1,441	5.0%	467	1.6%	240	0.8%	56	0.2%	602	2.1%	28,880
Miller County	23,877	95.1%	123	0.5%	462	1.8%	131	0.5%	129	0.5%	391	1.6%	25,113
Moniteau County	14,213	89.0%	646	4.0%	801	5.0%	62	0.4%	59	0.4%	182	1.1%	15,963
Monroe County	8,019	93.4%	234	2.7%	122	1.4%	38	0.4%	36	0.4%	134	1.6%	8,583
Montgomery County	11,083	94.7%	189	1.6%	183	1.6%	57	0.5%	27	0.2%	164	1.4%	11,703
Morgan County	19,027	94.3%	201	1.0%	415	2.1%	100	0.5%	126	0.6%	302	1.5%	20,171
Osage County	13,319	97.7%	45	0.3%	107	0.8%	24	0.2%	33	0.2%	100	0.7%	13,628
Pettis County	36,033	85.3%	1,292	3.1%	3,607	8.5%	433	1.0%	133	0.3%	757	1.8%	42,255
Pike County	16,214	88.4%	1,358	7.4%	429	2.3%	52	0.3%	41	0.2%	254	1.4%	18,348
Putnam County	4,694	96.6%	13	0.3%	76	1.6%	23	0.5%	8	0.2%	44	0.9%	4,858
Ralls County	9,769	95.8%	125	1.2%	106	1.0%	57	0.6%	23	0.2%	116	1.1%	10,196
Randolph County	22,370	89.1%	1,442	5.7%	484	1.9%	166	0.7%	80	0.3%	562	2.2%	25,104
Saline County	18,706	80.4%	1,188	5.1%	2,250	9.7%	486	2.1%	70	0.3%	558	2.4%	23,258
Schuyler County	4,309	97.1%	9	0.2%	59	1.3%	13	0.3%	6	0.1%	40	0.9%	4,436
Scotland County	4,733	97.5%	5	0.1%	44	0.9%	11	0.2%	16	0.3%	45	0.9%	4,854
Shelby County	5,886	96.1%	46	0.8%	107	1.7%	14	0.2%	14	0.2%	61	1.0%	6,128
Sullivan County	5,005	78.8%	134	2.1%	1,117	17.6%	15	0.2%	30	0.5%	52	0.8%	6,353
Region Total	773,935	87.9%	44,703	5.1%	27,367	3.1%	14,568	1.7%	3,323	0.4%	16,730	1.9%	880,626

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Figure 1. HIV disease cases (living and deceased), by current HIV vs. stage 3 (AIDS) status, Central HIV Care Region, 1982-2016

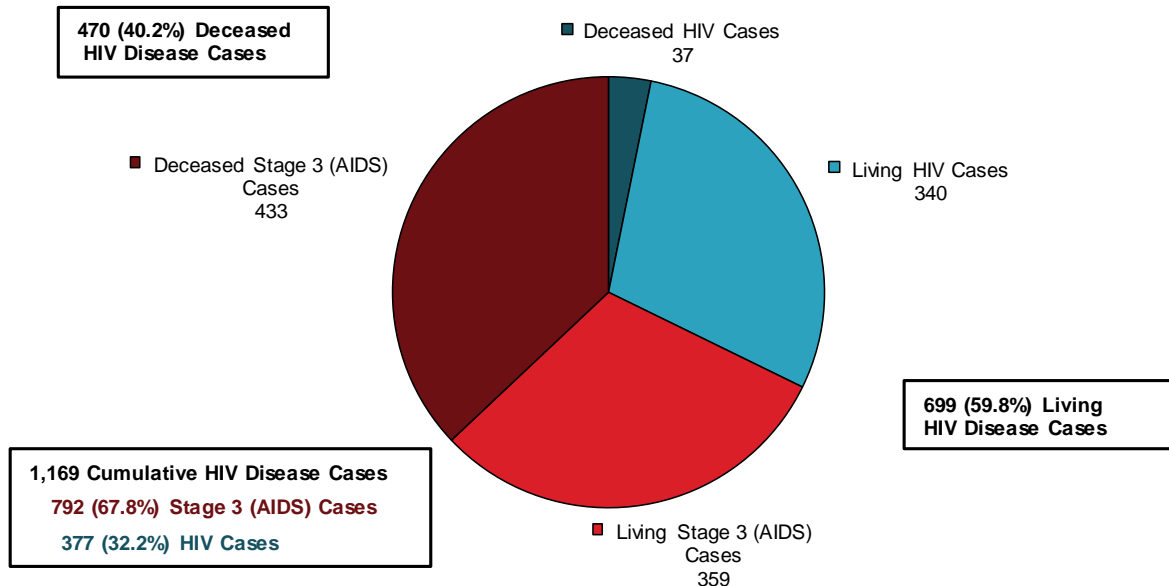
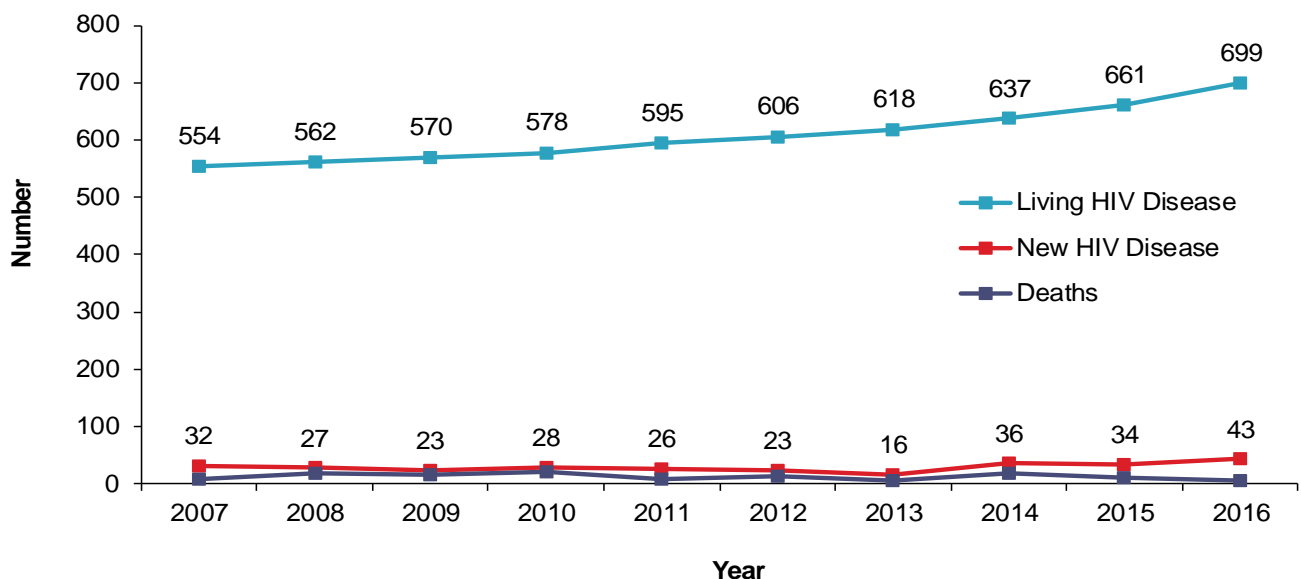


Figure 2. Living and new HIV disease cases and deaths, by year*, Central HIV Care Region, 2007-2016

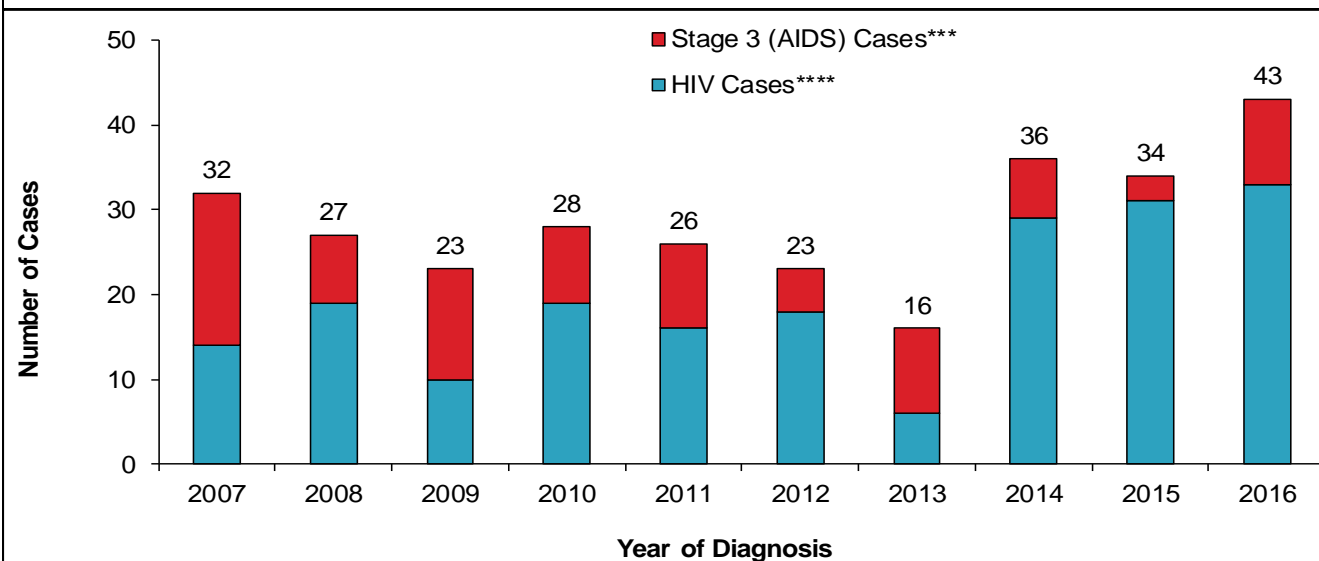


*Living HIV disease cases represent the number of individuals living with HIV disease at the end of the year. New HIV disease cases represent the number of individuals newly diagnosed in the year. HIV disease deaths represent the number of individuals that died in the year.

From 1982 to 2016, a total of 1,169 HIV disease cases were diagnosed in the Central HIV Care Region and reported to DHSS (Figure 1). Of the cumulative cases reported, 60% were still presumed to be living with HIV disease at the end of 2016. Among those living with HIV disease, 340 were classified as HIV cases at the end of 2016 and 359 were classified as stage 3 (AIDS) cases.

At the end of 2016, there were 699 persons living with HIV disease whose most recent diagnosis occurred in the Central HIV Care Region (Figure 2). The number of people living with HIV disease increased every year from 2007 to 2016. There were 43 new HIV disease diagnoses in 2016. The number of new diagnoses and the number of deaths among persons with HIV disease generally decreased from 2007 to 2013, increased in 2014, and remained generally stable from 2014 to 2016.

Figure 3. HIV disease cases, by current status* and year of diagnosis, Central HIV Care Region, 2007-2016**



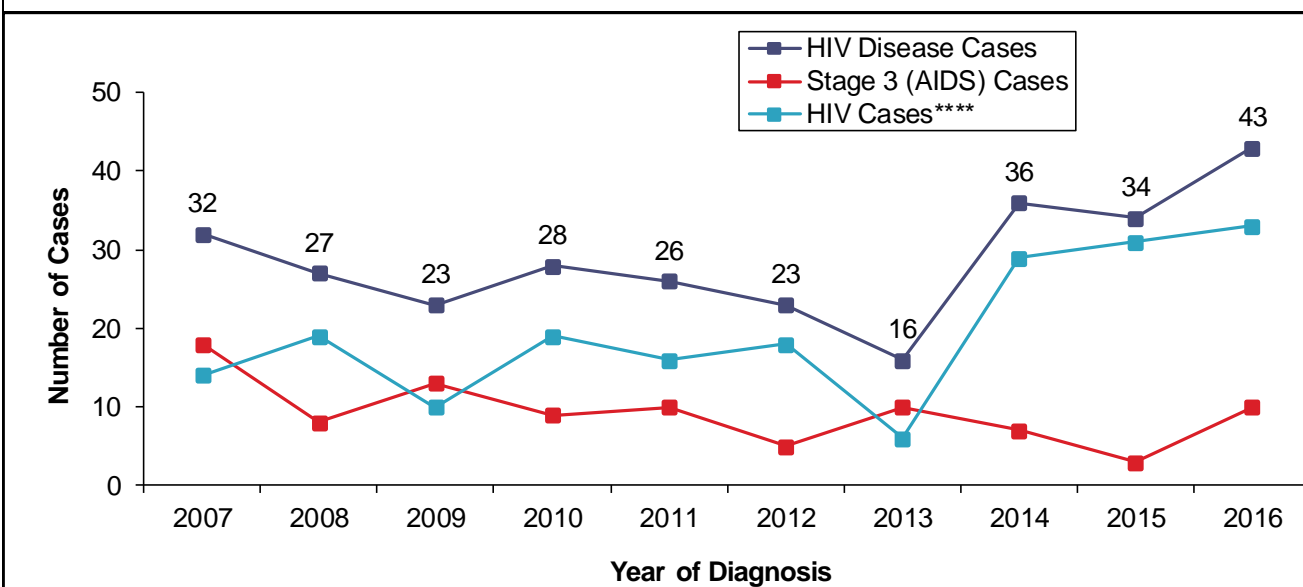
*HIV case vs. stage 3 (AIDS) case.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, Central HIV Care Region, 2007-2016**



*HIV case vs. stage 3 (AIDS) case.

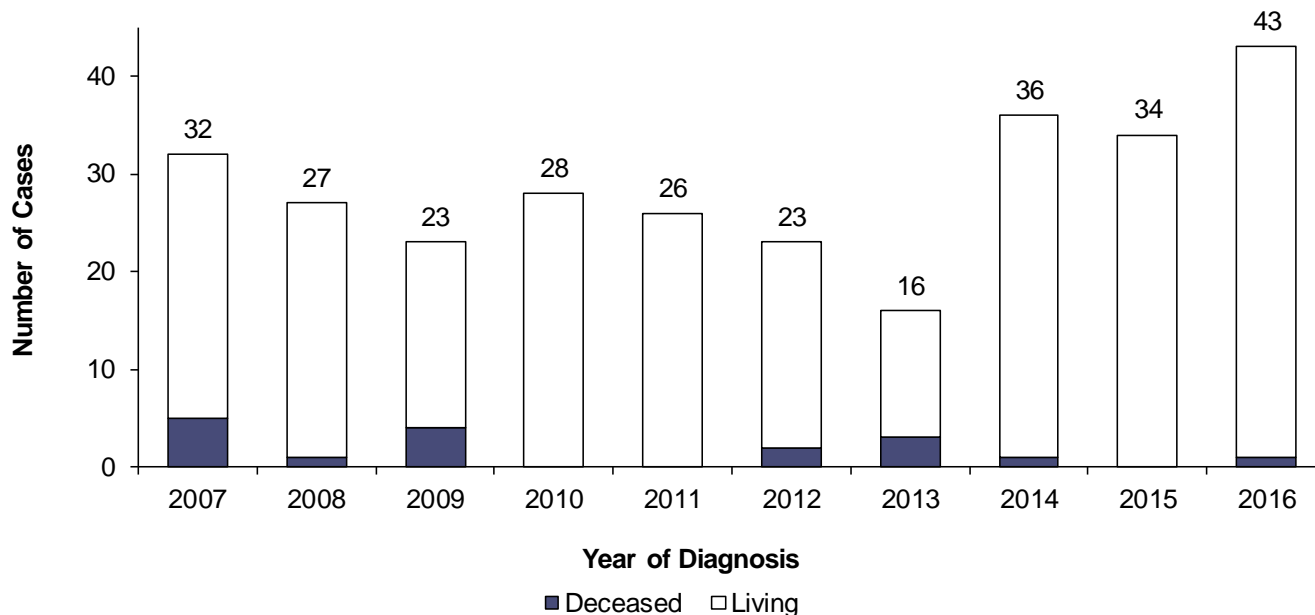
**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

The numbers of new diagnoses were generally stable, with slight fluctuations seen from 2007 to 2016 in the Central HIV Care Region. The most notable fluctuations include decreases in 2009 and 2013 and the increase in 2014 (Figures 3 and 4). Differences in the number of persons sub-classified as stage 3 (AIDS) cases each year are due to the progression of the disease over time.

Figure 5. Persons diagnosed with HIV disease, by current vital status* and year of diagnosis, Central HIV Care Region, 2007-2016**



*Vital status on December 31, 2016.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

Of the 32 persons diagnosed with HIV disease in 2007, five (16%) were deceased by the end of 2016 (Figure 5). Among the 43 persons first diagnosed in 2016, one death has been reported to DHSS. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease.

Table 1. Living[†] HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Central HIV Care Region, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	263	77.4%	60.0	282	78.6%	64.3	545	78.0%	124.3
Female	77	22.6%	17.4	77	21.4%	17.4	154	22.0%	34.8
Total	340	100.0%	38.6	359	100.0%	40.8	699	100.0%	79.4
Race/Ethnicity									
White	236	69.4%	30.5	209	58.2%	27.0	445	63.7%	57.5
Black/African American	84	24.7%	187.9	129	35.9%	288.6	213	30.5%	476.5
Hispanic	15	4.4%	54.8	18	5.0%	65.8	33	4.7%	120.6
Asian/Pacific Islander	3	0.9%	20.6	2	0.6%	13.7	5	0.7%	34.3
American Indian/Alaskan Native	2	0.6%	60.2	0	0.0%	0.0	2	0.3%	60.2
Two or More Races/Unknown	0	0.0%	--	1	0.3%	--	1	0.1%	--
Total	340	100.0%	38.6	359	100.0%	40.8	699	100.0%	79.4
Race/Ethnicity-Males									
White Male	186	70.7%	48.5	165	58.5%	43.1	351	64.4%	91.6
Black/African American Male	60	22.8%	246.1	100	35.5%	410.1	160	29.4%	656.2
Hispanic Male	13	4.9%	91.8	15	5.3%	105.9	28	5.1%	197.7
Asian/Pacific Islander Male	2	0.8%	29.3	2	0.7%	29.3	4	0.7%	58.7
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	2	0.8%	--	0	0.0%	--	2	0.4%	--
Total	263	100.0%	60.0	282	100.0%	64.3	545	100.0%	124.3
Race/Ethnicity-Females									
White Female	50	64.9%	12.8	44	57.1%	11.3	94	61.0%	24.1
Black/African American Female	24	31.2%	118.1	29	37.7%	142.7	53	34.4%	260.8
Hispanic Female	2	2.6%	15.1	3	3.9%	22.7	5	3.2%	37.9
Asian/Pacific Islander Female	1	1.3%	12.9	0	0.0%	0.0	1	0.6%	12.9
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	1	1.3%	--	1	0.6%	--
Total	77	100.0%	17.4	77	100.0%	17.4	154	100.0%	34.8
Current Age[‡]									
<2	0	0.0%	0.0	1	0.3%	4.8	1	0.1%	4.8
2-12	6	1.8%	5.1	1	0.3%	0.9	7	1.0%	6.0
13-18	2	0.6%	3.0	1	0.3%	1.5	3	0.4%	4.5
19-24	23	6.8%	66.5	4	1.1%	11.6	27	3.9%	78.1
25-44	169	49.7%	80.7	85	23.7%	40.6	254	36.3%	121.2
45-64	125	36.8%	55.2	247	68.8%	109.0	372	53.2%	164.2
65+	15	4.4%	10.3	20	5.6%	13.8	35	5.0%	24.1
Total	340	100.0%	41.4	359	100.0%	43.7	699	100.0%	85.2

[†]Includes persons diagnosed with HIV disease in the Central HIV Care Region who are currently living, regardless of current residence.

*Cases which remained HIV cases at the end of 2016.

**Cases classified as stage 3 (AIDS) by December 31, 2016.

***The sum of HIV cases and stage 3 (AIDS) cases.

****Per 100,000 population based on 2015 DHSS estimates.

[‡]Based on age as of December 31, 2016.

Note: Percentages may not total 100% due to rounding.

Table 2. Diagnosed HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Central HIV Care Region, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	25	75.8%	5.7	7	70.0%	1.6	32	74.4%	7.3
Female	8	24.2%	1.8	3	30.0%	0.7	11	25.6%	2.5
Total	33	100.0%	3.7	10	100.0%	1.1	43	100.0%	4.9
Race/Ethnicity									
White	27	81.8%	3.5	8	80.0%	1.0	35	81.4%	4.5
Black/African American	5	15.2%	11.2	1	10.0%	2.2	6	14.0%	13.4
Hispanic	1	3.0%	3.7	1	10.0%	3.7	2	4.7%	7.3
Asian/Pacific Islander	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	33	100.0%	3.7	10	100.0%	1.1	43	100.0%	4.9
Race/Ethnicity-Males									
White Male	20	80.0%	5.2	6	85.7%	1.6	26	81.3%	6.8
Black/African American Male	4	16.0%	16.4	0	0.0%	0.0	4	12.5%	16.4
Hispanic Male	1	4.0%	7.1	1	14.3%	7.1	2	6.3%	14.1
Asian/Pacific Islander Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	25	100.0%	5.7	7	100.0%	1.6	32	100.0%	7.3
Race/Ethnicity-Females									
White Female	7	87.5%	1.8	2	66.7%	0.5	9	81.8%	2.3
Black/African American Female	1	12.5%	4.9	1	33.3%	4.9	2	18.2%	9.8
Hispanic Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	8	100.0%	1.8	3	100.0%	0.7	11	100.0%	2.5
Current Age[†]									
<2	0	0.0%	0.0	1	10.0%	4.8	1	2.3%	4.8
2-12	1	3.0%	0.9	0	0.0%	0.0	1	2.3%	0.9
13-18	1	3.0%	1.5	0	0.0%	0.0	1	2.3%	1.5
19-24	12	36.4%	34.7	0	0.0%	0.0	12	27.9%	34.7
25-44	12	36.4%	5.7	8	80.0%	3.8	20	46.5%	9.5
45-64	7	21.2%	3.1	1	10.0%	0.4	8	18.6%	3.5
65+	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Total	33	100.0%	4.0	10	100.0%	1.2	43	100.0%	5.2

*HIV cases diagnosed during 2016 which remained HIV cases at the end of the year.

**Stage 3 (AIDS) cases initially diagnosed in 2016.

***The sum of newly diagnosed HIV cases and newly diagnosed stage 3 (AIDS) cases. Does not include cases diagnosed prior to 2016 with HIV which progressed to stage 3 (AIDS) in 2016.

****Per 100,000 population based on 2015 DHSS estimates.

†Based on age as of December 31, 2016.

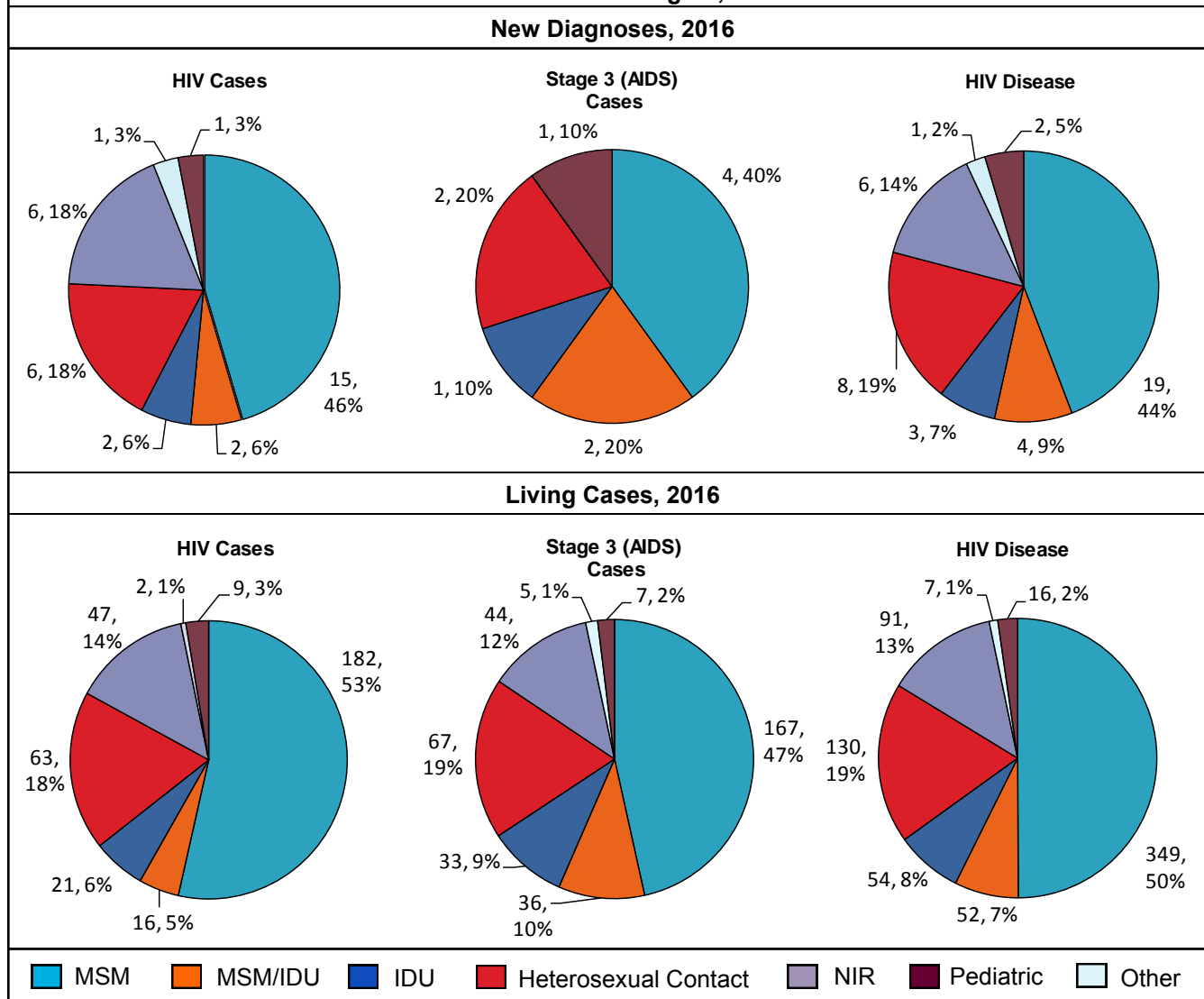
Note: Percentages may not total 100% due to rounding.

Epi Profiles Summary: Central HIV Care Region

Of the 699 persons living with HIV disease at the end of 2016, 78% were males (Table 1). The rate of those living with HIV disease was 3.6 times as high for males compared to females. Although whites represented the largest proportion of living HIV disease cases (64%), the rate of those living with HIV disease among blacks/African Americans was 8.3 times as high as the rate among whites. The rate was 2.1 times as high among Hispanics compared to whites. Among males, the rate of living cases was 7.2 times as high among blacks/African Americans compared to whites and 2.2 times as high among Hispanics compared to whites. Among females, the rate of those living with HIV disease was 10.8 times as high among blacks/African Americans compared to whites and 1.8 times as high among Hispanics compared to whites.

Of the 43 persons newly diagnosed with HIV disease in 2016, 23% were classified as stage 3 (AIDS) cases by the end of 2016 (Table 2). Males represented 74% of new diagnoses. Whites represented the majority (81%) of all new HIV disease cases.

Figure 6. Diagnosed and living HIV, stage 3 (AIDS), and HIV disease cases, by exposure category, Central HIV Care Region, 2016



Among all categories, the majority of cases were attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and stage 3 (AIDS) cases and rates, by geographic area, Central HIV Care Region, 2016

Geographic Area	HIV Cases						Stage 3 (AIDS) Cases					
	Diagnosed 2016*			Living			Diagnosed 2016**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Boone County	8	24.2%	4.6	133	39.1%	76.0	2	20.0%	1.1	116	32.3%	66.3
Cole County	3	9.1%	3.9	48	14.1%	62.6	2	20.0%	2.6	52	14.5%	67.8
Callaway County	0	0.0%	0.0	10	2.9%	22.3	0	0.0%	0.0	36	10.0%	80.3
Marion County	1	3.0%	3.5	9	2.6%	31.2	0	0.0%	0.0	7	1.9%	24.2
Pettis County	1	3.0%	2.4	10	2.9%	23.7	1	10.0%	2.4	16	4.5%	37.9
Gasconade County	0	0.0%	0.0	3	0.9%	20.2	0	0.0%	0.0	3	0.8%	20.2
Remainder of Region	20	60.6%	4.0	127	37.4%	25.5	5	50.0%	1.0	129	35.9%	25.9
CENTRAL HIV CARE REGION TOTAL	33	100.0%	3.7	340	100.0%	38.6	10	100.0%	1.1	359	100.0%	40.8

*HIV cases diagnosed and reported to DHSS during 2016 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

***Per 100,000 population based on 2015 DHSS estimates.

Note: Percentages may not total 100% due to rounding.

The number of persons newly diagnosed that remained classified as HIV cases at the end of 2016 was greatest in Boone County (8) (Table 3). The number of persons newly diagnosed that progressed to stage 3 (AIDS) by the end of 2016 was highest in Boone County as well (2). The rate of persons living with HIV disease among those classified as HIV cases was also highest in Boone County. However, the rate of persons living with HIV disease among those classified as stage 3 (AIDS) cases was highest in Callaway County compared to other areas in the Central HIV Care Region.

Table 4. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men, by selected race/ethnicity, Central HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	12	80.0%	133	73.1%	3	75.0%	111	66.5%
Black/African American	2	13.3%	38	20.9%	0	0.0%	49	29.3%
Hispanic	1	6.7%	10	5.5%	1	25.0%	5	3.0%
Other/Unknown	0	0.0%	1	0.5%	0	0.0%	2	1.2%
CENTRAL HIV CARE REGION TOTAL	15	100.0%	182	100.0%	4	100.0%	167	100.0%

*Remained HIV cases at the end of the year.
 **Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.
 Note: Percentages may not total 100% due to rounding.

Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity and current age group, Central HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	11	4.5%	5	5.7%	0	0.0%	16	4.6%
25-44	79	32.4%	35	40.2%	9	60.0%	125	35.8%
45-64	138	56.6%	42	48.3%	6	40.0%	186	53.3%
65+	16	6.6%	5	5.7%	0	0.0%	22	6.3%
CENTRAL HIV CARE REGION TOTAL	244	100.0%	87	100.0%	15	100.0%	349	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.
 **Percentage of cases per age group.
 Note: Percentages may not total 100% due to rounding.

Table 6. Living HIV disease cases in men who have sex with men, by selected race/ethnicity and geographic area, Central HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Boone County	105	72.4%	31	21.4%	6	4.1%	145	41.5%
Cole County	22	43.1%	27	52.9%	2	3.9%	51	14.6%
Remaining Counties	117	76.5%	29	19.0%	7	4.6%	153	43.8%
CENTRAL HIV CARE REGION TOTAL	244	69.9%	87	24.9%	15	4.3%	349	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.
 **Percentage of race/ethnicity in each area.
 ***Percentage of cases per area.
 Note: Percentages may not total 100% due to rounding.

A total of 19 new HIV disease diagnoses were attributed to MSM in 2016 for the Central HIV Care Region (Table 4). Whites represented the largest number of total new HIV disease diagnoses. There were 349 living HIV disease cases attributed to MSM in the Central HIV Care Region. White MSM represented the greatest proportion among living HIV and stage 3 (AIDS) cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 5). The greatest proportions of white MSM (57%) and black/African American MSM (48%) living with HIV disease were between 45 and 64 years of age. In contrast, the greatest proportion of Hispanic MSM (60%) living with HIV disease was between 25 and 44 years old.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM (Table 6). A greater proportion of MSM living with HIV disease were black/African American in Cole County (53%) compared to Boone County (21%) and the remainder of the Central HIV Care Region (19%).

Table 7. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men and inject drugs, by selected race/ethnicity, Central HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	2	100.0%	15	93.8%	2	100.0%	19	52.8%
Black/African American	0	0.0%	1	6.3%	0	0.0%	15	41.7%
Hispanic	0	0.0%	0	0.0%	0	0.0%	2	5.6%
Other/Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%
CENTRAL HIV CARE REGION TOTAL	2	100.0%	16	100.0%	2	100.0%	36	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

Note: Percentages may not total 100% due to rounding.

Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity and current age group, Central HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	2.9%	0	0.0%	0	0.0%	1	1.9%
25-44	15	44.1%	5	31.3%	1	50.0%	21	40.4%
45-64	18	52.9%	10	62.5%	1	50.0%	29	55.8%
65+	0	0.0%	1	6.3%	0	0.0%	1	1.9%
CENTRAL HIV CARE REGION TOTAL	34	100.0%	16	100.0%	2	100.0%	52	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 9. Living HIV disease cases in men who have sex with men and inject drugs, by geographic area, Central HIV Care Region, 2016

Geographic Area	Cases	%
Boone County	19	36.5%
Cole County	11	21.2%
Marion County	2	3.8%
Pettis County	3	5.8%
Remaining Counties	17	32.7%
CENTRAL HIV CARE REGION TOTAL	52	100.0%

Note: Percentages may not total 100% due to rounding.

Four new HIV disease diagnoses were attributed to MSM/IDU in 2016 for the Central HIV Care Region (Table 7). There were 52 MSM/IDU living with HIV disease at the end of 2016 whose most recent diagnosis occurred in the Central HIV Care Region. The largest proportions of both living HIV and stage 3 (AIDS) cases were white.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM/IDU (Table 8). The numbers of living cases among white MSM/IDU and black/African American MSM/IDU were greatest among those 45 to 64 years of age. In contrast, the numbers of living cases among Hispanics were evenly distributed among persons 25 to 44 years of age and 45 to 64 years of age. However, the number of cases is small among Hispanics and therefore it is difficult to make meaningful interpretations.

The largest numbers of MSM/IDU living with HIV disease in the Central HIV Care Region were most recently diagnosed in Boone County (19) (Table 9).

Table 10. Newly diagnosed and living HIV and stage 3 (AIDS) cases in injection drug users, by selected race/ethnicity and sex, Central HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	1	50.0%	11	52.4%	0	0.0%	11	33.3%
Black/African American Male	0	0.0%	0	0.0%	0	0.0%	10	30.3%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	3	9.1%
White Female	1	50.0%	8	38.1%	1	100.0%	6	18.2%
Black/African American Female	0	0.0%	2	9.5%	0	0.0%	3	9.1%
Hispanic Female	0	0.0%	0	0.0%	0	0.0%	0	0.0%
CENTRAL HIV CARE REGION TOTAL†	2	100.0%	21	100.0%	1	100.0%	33	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 11. Living HIV disease cases in injection drug users, by selected race/ethnicity and current age group, Central HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	1	7.1%	0	0.0%	2	3.7%
25-44	4	18.2%	1	10.0%	8	57.1%	2	40.0%	16	29.6%
45-64	17	77.3%	8	80.0%	5	35.7%	3	60.0%	34	63.0%
65+	1	4.5%	1	10.0%	0	0.0%	0	0.0%	2	3.7%
CENTRAL HIV CARE REGION TOTAL	22	100.0%	10	100.0%	14	100.0%	5	100.0%	54	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 12. Living HIV disease cases in injection drug users, by geographic area, Central HIV Care Region, 2016

Geographic Area	Cases	%
Boone County	11	20.4%
Cole County	7	13.0%
Marion County	2	3.7%
Pettis County	3	5.6%
Remaining Counties	31	57.4%
CENTRAL HIV CARE REGION TOTAL	54	100.0%

Note: Percentages may not total 100% due to rounding.

Three new HIV disease diagnoses were attributed to IDU in 2016 for the Central HIV Care Region (Table 10). There were 54 living HIV disease cases attributed to IDU at the end of 2016 in the Central HIV Care Region. Of persons living with HIV disease, 61% were classified as stage 3 (AIDS) at the end of 2016. The largest proportion of both living HIV and stage 3 (AIDS) cases was among white males (52% and 33% respectively).

Overall, the largest numbers of persons living with HIV disease among IDU in the Central HIV Care Region were between 45 and 64 years of age at the end of 2016 (34) (Table 11).

The largest numbers of IDU living with HIV disease in the Central HIV Care Region were most recently diagnosed in Boone County (11) (Table 12).

Table 13. Newly diagnosed and living HIV and stage 3 (AIDS) cases in heterosexual contacts, by selected race/ethnicity and sex, Central HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	8	12.7%	0	--	3	4.5%
Black/African American Male	0	0.0%	6	9.5%	0	0.0%	12	17.9%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	0	0.0%
White Female	5	83.3%	33	52.4%	1	50.0%	34	50.7%
Black/African American Female	1	16.7%	12	19.0%	1	50.0%	15	22.4%
Hispanic Female	0	0.0%	1	1.6%	0	0.0%	2	3.0%
CENTRAL HIV CARE REGION TOTAL[†]	6	100.0%	63	100.0%	2	100.0%	67	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex and current age group, Central HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	3	4.5%	0	0.0%	3	2.3%
25-44	4	36.4%	6	33.3%	24	35.8%	10	37.0%	47	36.2%
45-64	6	54.5%	12	66.7%	38	56.7%	16	59.3%	76	58.5%
65+	1	9.1%	0	0.0%	2	3.0%	1	3.7%	4	3.1%
CENTRAL HIV CARE REGION TOTAL	11	100.0%	18	100.0%	67	100.0%	27	100.0%	130	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 15. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and geographic area, Central HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Boone County	19	54.3%	14	40.0%	1	2.9%	35	26.9%
Cole County	6	33.3%	11	61.1%	0	0.0%	18	13.8%
Remaining Counties	53	68.8%	20	26.0%	2	2.6%	77	59.2%
CENTRAL HIV CARE REGION TOTAL	78	60.0%	45	34.6%	3	2.3%	130	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race in each area.

***Percentage of cases per area.

Note: Percentages may not total 100% due to rounding.

Eight new HIV disease diagnoses were attributed to heterosexual contact in 2016 for the Central HIV Care Region (Table 13). There were 130 persons living with HIV disease attributed to heterosexual contact at the end of 2016 in the Central HIV Care Region. White females represented the largest proportions of both living HIV and stage 3 (AIDS) cases among heterosexual contact cases.

At the end of 2016, the number of heterosexual contact cases living with HIV disease was greatest among those between 45 and 64 years of age (Table 14).

There were differences in the distribution of persons living with HIV disease by race/ethnicity among the geographic areas for heterosexual contact cases (Table 15). In Cole County, black/African American heterosexual contact cases comprised a larger proportion of persons living with HIV disease compared to the remainder of the region.

Figure 7. Reported P&S syphilis cases, by race and sex and age group at diagnosis, Central HIV Care Region, 2016

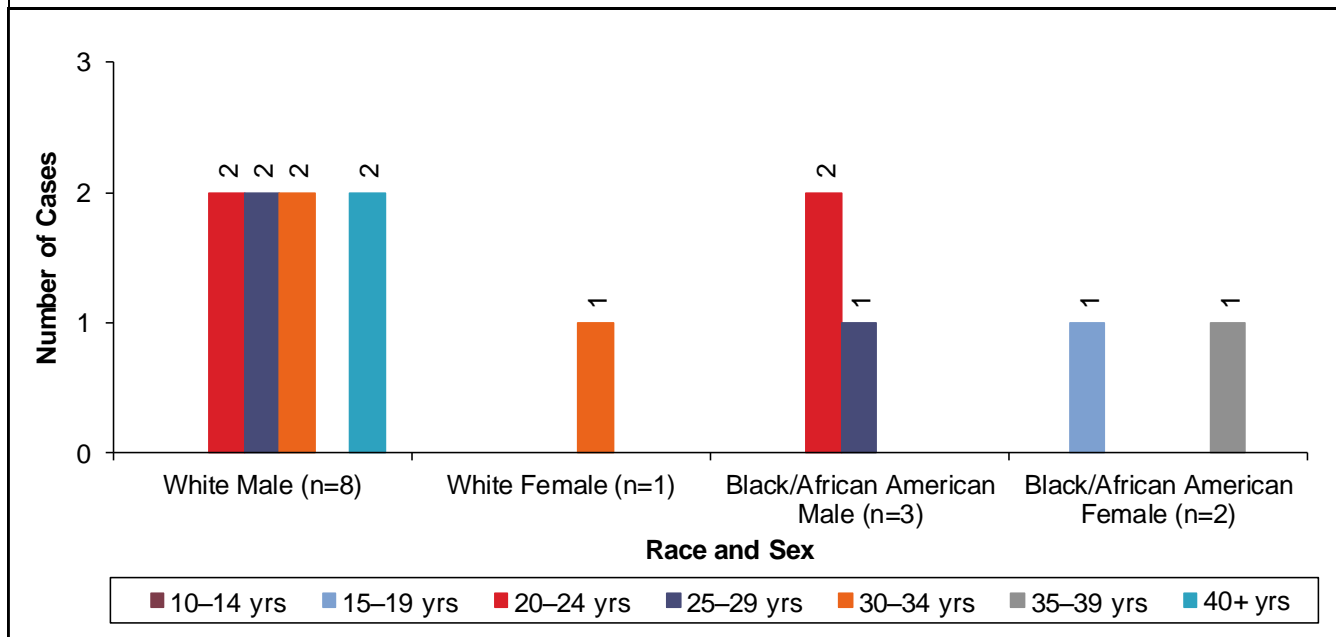
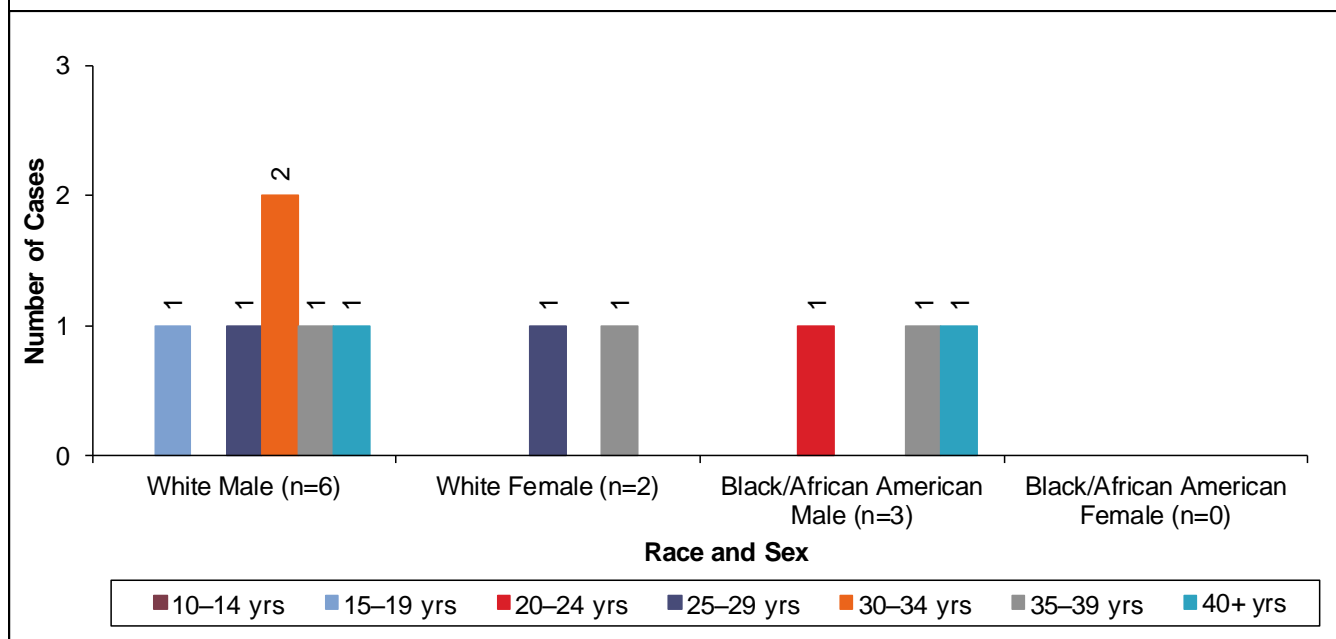
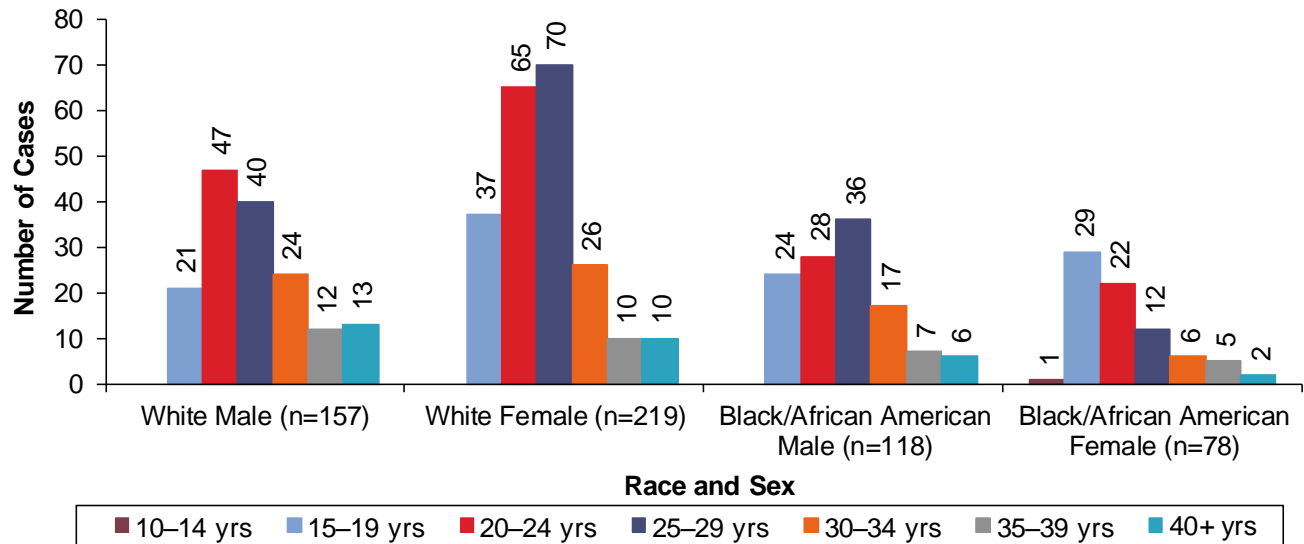


Figure 8. Reported early latent syphilis cases, by race and sex and age group at diagnosis, Central HIV Care Region, 2016

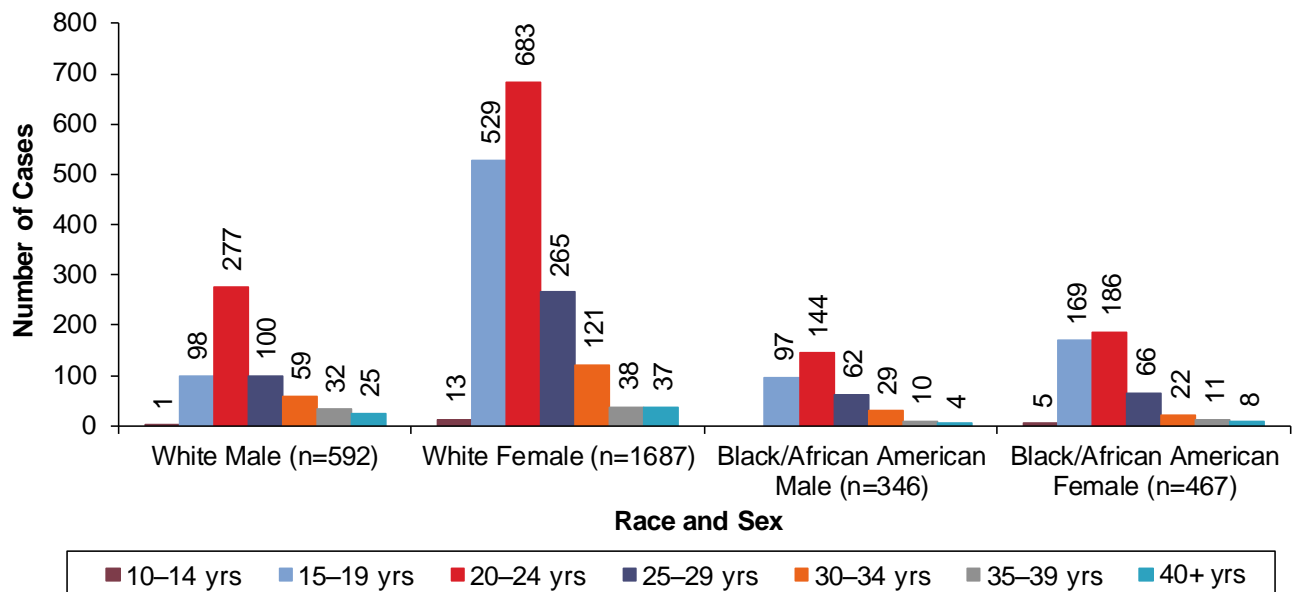


The largest numbers of reported P&S cases were reported among white males (8) in 2016 in the Central HIV Care Region (Figure 7). From 2015 to 2016, the number of P&S syphilis cases increased among black/African American females (1 to 2) and decreased among black/African American males (6 to 3). The number of cases remained the same among white males (8) and white females (1). There were not significant differences in the age at diagnosis among the select race and sex categories presented. The largest numbers of reported cases were among persons ages 20 to 24 years of age.

The largest numbers of reported early latent syphilis cases were reported among white males (6) (Figure 8). The numbers of reported early latent syphilis cases increased from 2015 to 2016 among white males (3 to 6) and white females (1 to 2). The number of reported early latent syphilis cases remained the same among black/African American males (3). There were not significant differences in the age at diagnosis among the race and sex categories presented.

Figure 9. Reported gonorrhea cases, by race and sex and age group at diagnosis, Central HIV Care Region, 2016

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

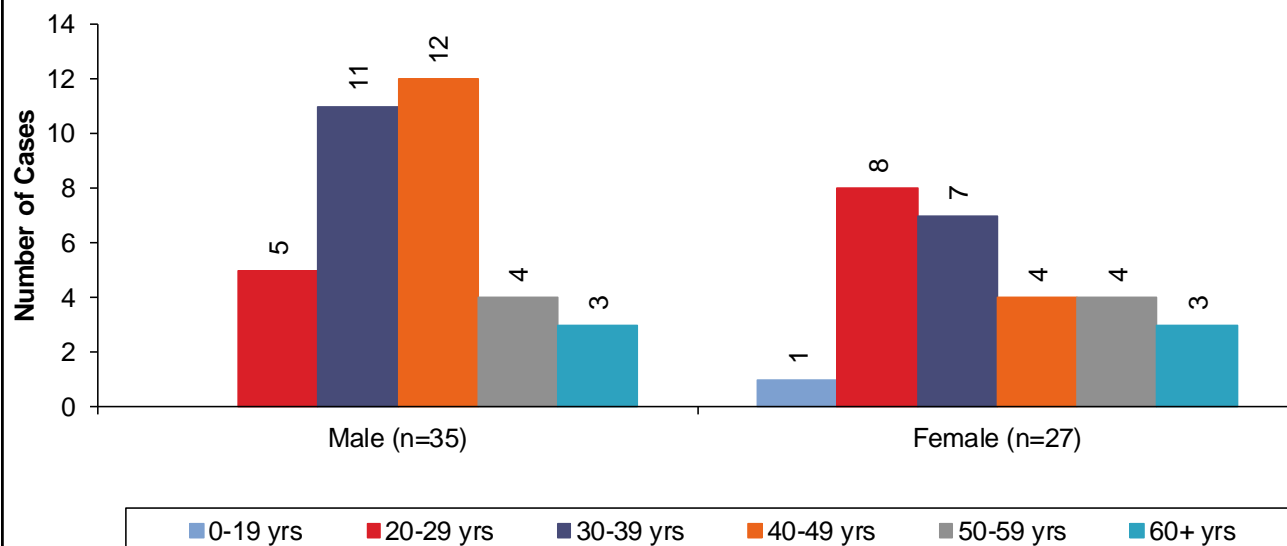
Figure 10. Reported chlamydia cases, by race and sex and age group at diagnosis, Central HIV Care Region, 2016

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest numbers of gonorrhea cases were reported among white females (219), followed by white males (157) (Figure 9). The largest numbers of reported cases among white females and black/African American males were between 25 and 29 years of age. In contrast, the largest numbers of reported cases among white males were between 20 and 24 years of age and between 15 to 19 years of age among black/African American females.

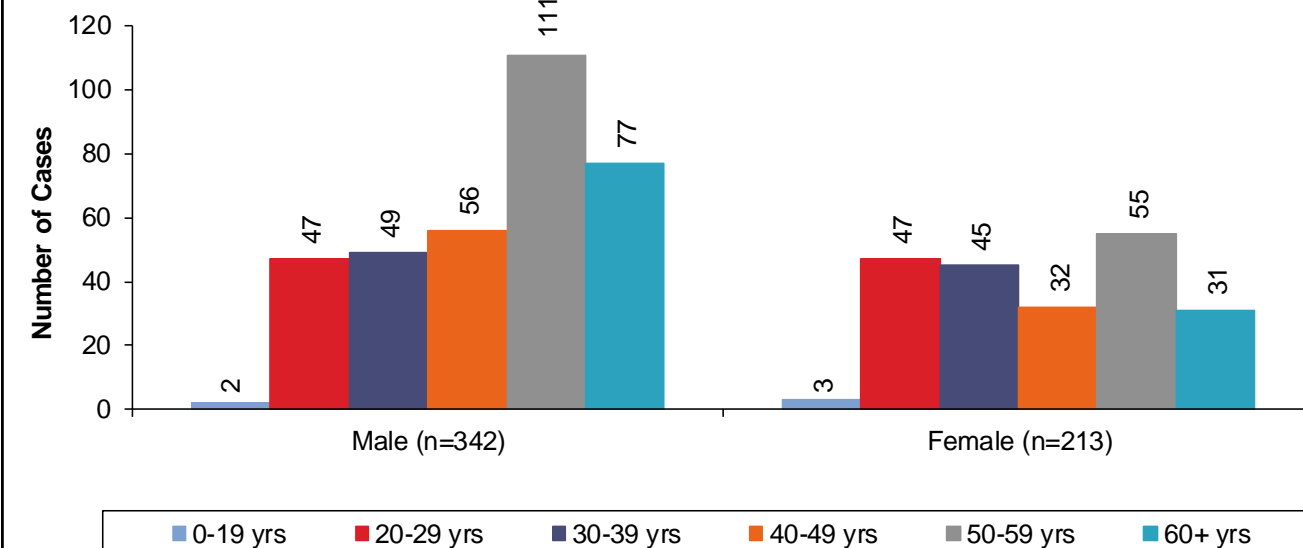
The largest numbers of chlamydia cases were reported among white females (1,687), followed by white males (592) (Figure 10). The largest numbers of reported cases were diagnosed between 20 and 24 years of age among all race and sex categories presented.

Figure 11. Reported hepatitis B cases, by sex and age group at diagnosis, Central HIV Care Region, 2016



Note: Totals include persons whose age at diagnosis is unknown.

Figure 12. Reported hepatitis C cases, by sex and age group at diagnosis, Central HIV Care Region, 2016

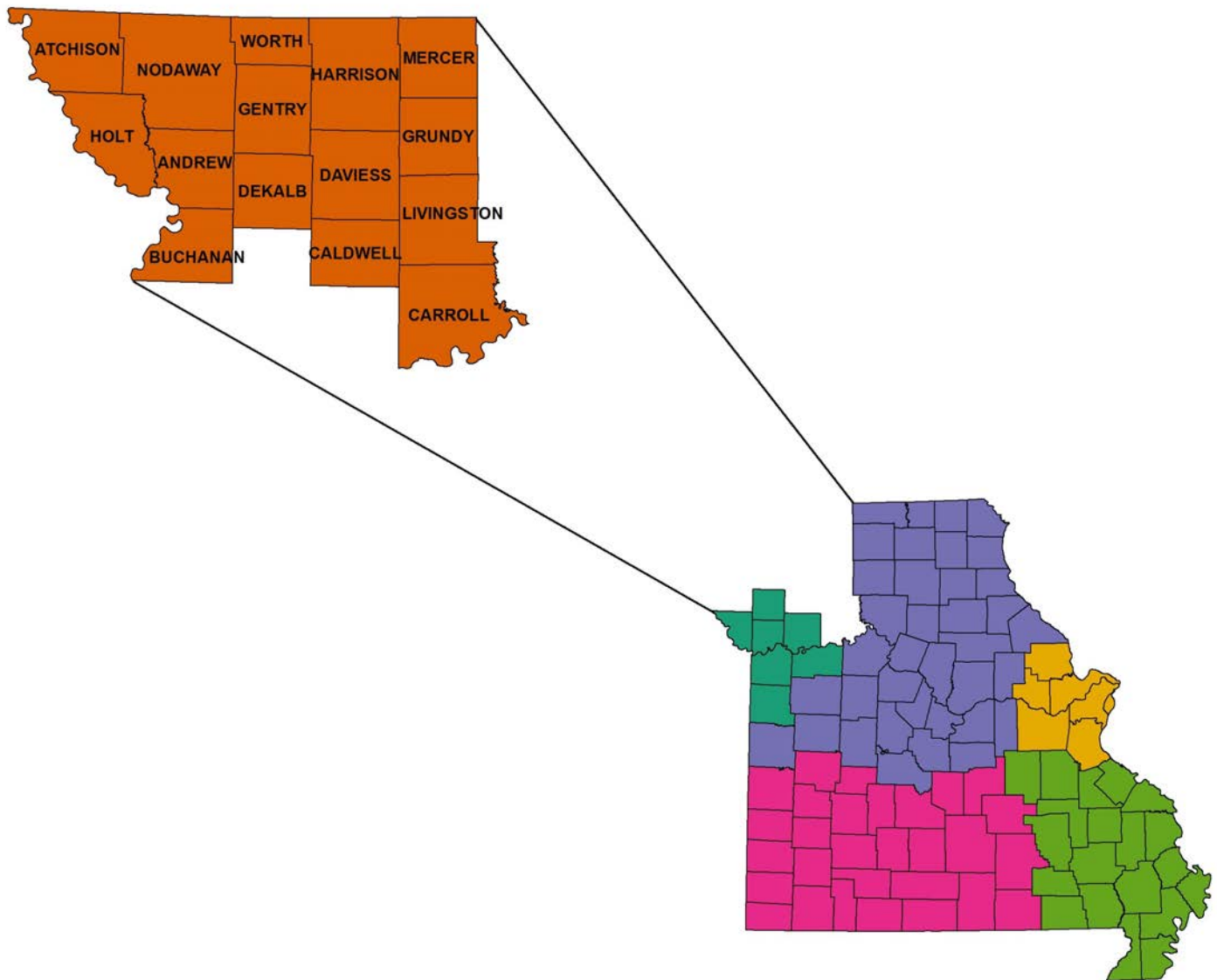


Note: Totals include persons whose age at diagnosis is unknown.

There were 62 reported cases of hepatitis B in the Central HIV Care Region during 2016 (Figure 11). The proportion of reported hepatitis B cases was greater among males than females. There were differences in the age distribution of reported hepatitis B cases by sex. Among males, the greatest proportion of cases was between 40 and 49 years of age. Among females, the greatest proportion of cases was between 20 and 29 years of age.

In 2016, there were 555 hepatitis C cases reported in the Central HIV Care Region (Figure 12). Of the reported hepatitis C cases, 62% were male. Among both males and females, the largest numbers of cases were reported among persons 50 to 59 years of age at diagnosis.

NORTHWEST HIV CARE REGION



Population Counts, Northwest HIV Care Region, 2015

County	White		Black/African American		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races/Other		Total
Andrew County	16,420	94.9%	130	0.8%	409	2.4%	88	0.5%	46	0.3%	203	1.2%	17,296
Atchison County	5,125	96.6%	24	0.5%	77	1.5%	15	0.3%	16	0.3%	49	0.9%	5,306
Buchanan County	74,772	83.9%	5,223	5.9%	5,553	6.2%	1,253	1.4%	387	0.4%	1,912	2.1%	89,100
Caldwell County	8,530	94.6%	62	0.7%	194	2.2%	30	0.3%	46	0.5%	152	1.7%	9,014
Carroll County	8,505	94.6%	183	2.0%	121	1.3%	25	0.3%	26	0.3%	132	1.5%	8,992
Daviess County	7,943	96.2%	53	0.6%	111	1.3%	15	0.2%	30	0.4%	101	1.2%	8,253
DeKalb County	10,703	84.4%	1,477	11.6%	285	2.2%	51	0.4%	57	0.4%	114	0.9%	12,687
Gentry County	6,458	96.5%	30	0.4%	82	1.2%	31	0.5%	15	0.2%	76	1.1%	6,692
Grundy County	9,557	94.7%	86	0.9%	212	2.1%	76	0.8%	56	0.6%	110	1.1%	10,097
Harrison County	8,241	95.7%	36	0.4%	175	2.0%	39	0.5%	33	0.4%	91	1.1%	8,615
Holt County	4,318	96.3%	14	0.3%	45	1.0%	18	0.4%	48	1.1%	41	0.9%	4,484
Livingston County	13,914	92.6%	487	3.2%	270	1.8%	98	0.7%	62	0.4%	197	1.3%	15,028
Mercer County	3,555	96.2%	9	0.2%	41	1.1%	25	0.7%	19	0.5%	45	1.2%	3,694
Nodaway County	21,101	92.5%	622	2.7%	364	1.6%	440	1.9%	51	0.2%	232	1.0%	22,810
Worth County	1,976	96.1%	20	1.0%	29	1.4%	5	0.2%	5	0.2%	22	1.1%	2,057
Region Total	201,118	89.7%	8,456	3.8%	7,968	3.6%	2,209	1.0%	897	0.4%	3,477	1.6%	224,125

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Figure 1. HIV disease cases (living and deceased), by current HIV vs. stage 3 (AIDS) status, Northwest HIV Care Region, 1982-2016

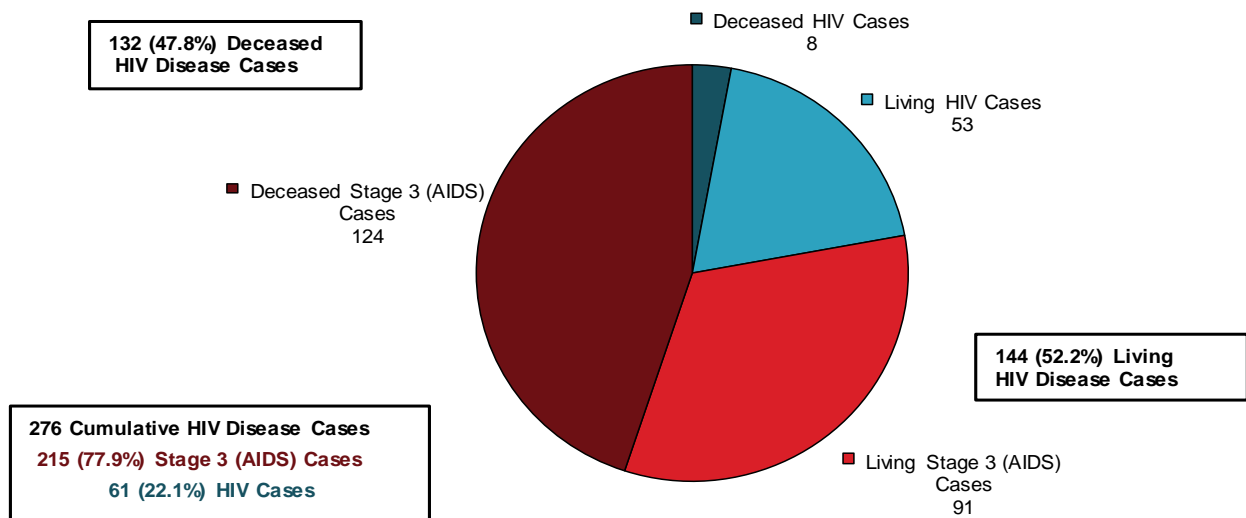
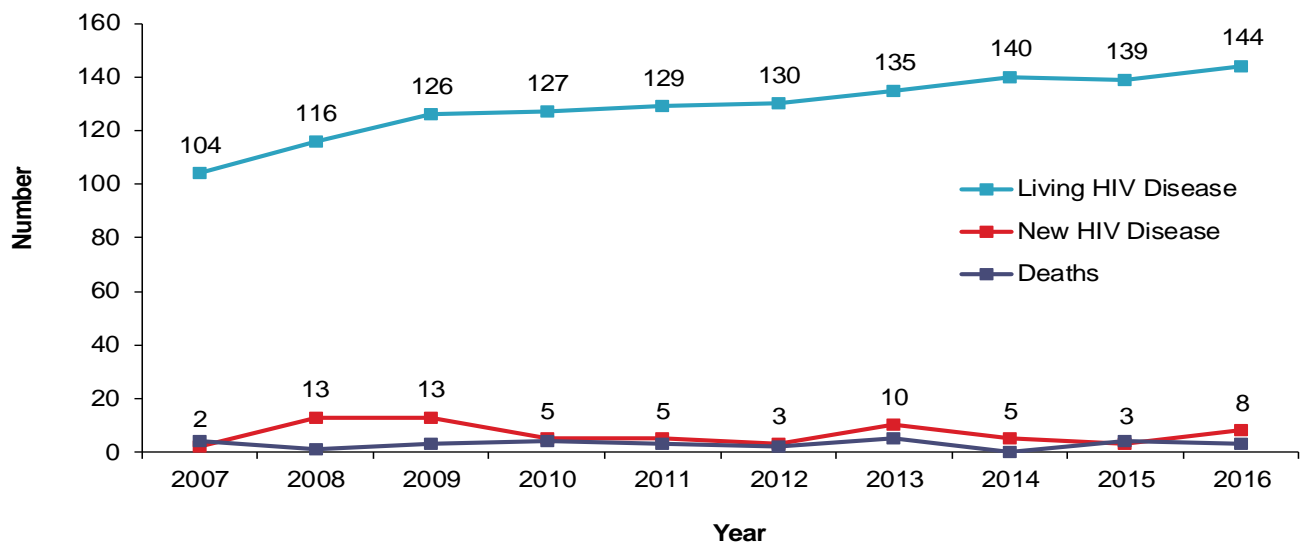


Figure 2. Living and new HIV disease cases and deaths, by year*, Northwest HIV Care Region, 2007-2016

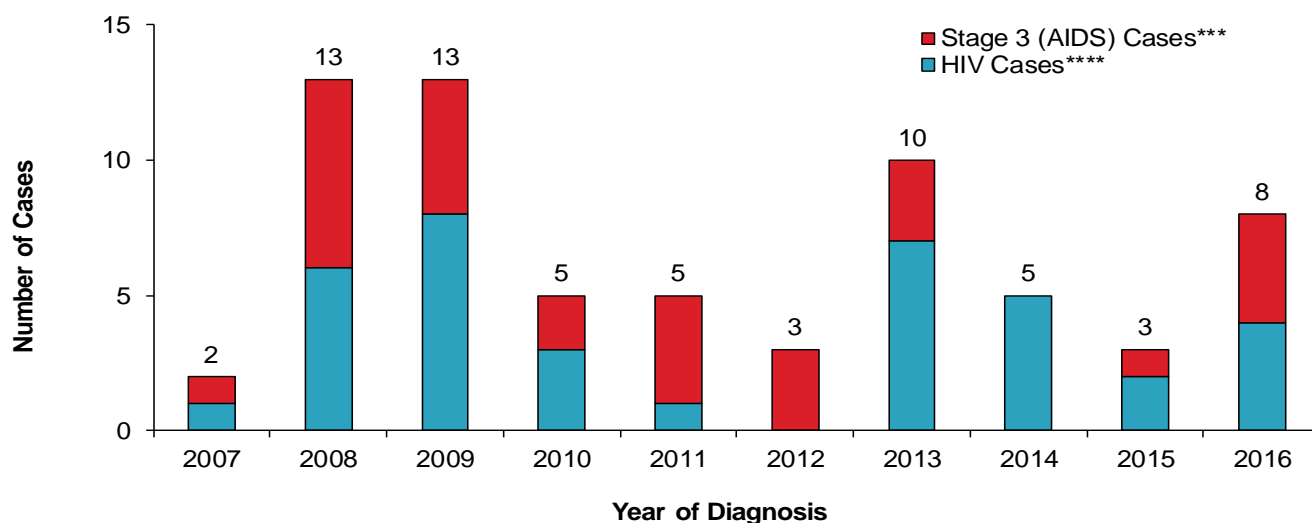


*Living HIV disease cases represent the number of individuals living with HIV disease at the end of the year. New HIV disease cases represent the number of individuals newly diagnosed in the year. HIV disease deaths represent the number of individuals that died in the year.

From 1982 to 2016, there have been 276 HIV disease cases diagnosed in the Northwest HIV Care Region and reported to DHSS (Figure 1). Of the cumulative cases reported, 52% were still presumed to be living with HIV disease at the end of 2016. Among those living with HIV disease, 53 were classified as HIV cases at the end of 2016 and 91 were classified as stage 3 (AIDS) cases.

At the end of 2016, there were 144 persons living with HIV disease whose most recent diagnosis occurred in the Northwest HIV Care Region (Figure 2). The number of people living with HIV disease generally increased over time. There were eight new HIV disease diagnoses in 2016. The number of new diagnoses remained generally stable since 2007 with the exception of increases observed from 2007 to 2009 and from 2012 to 2013. The number of deaths among persons with HIV disease remained stable.

Figure 3. HIV disease cases, by current status* and year of diagnosis, Northwest HIV Care Region, 2007-2016**



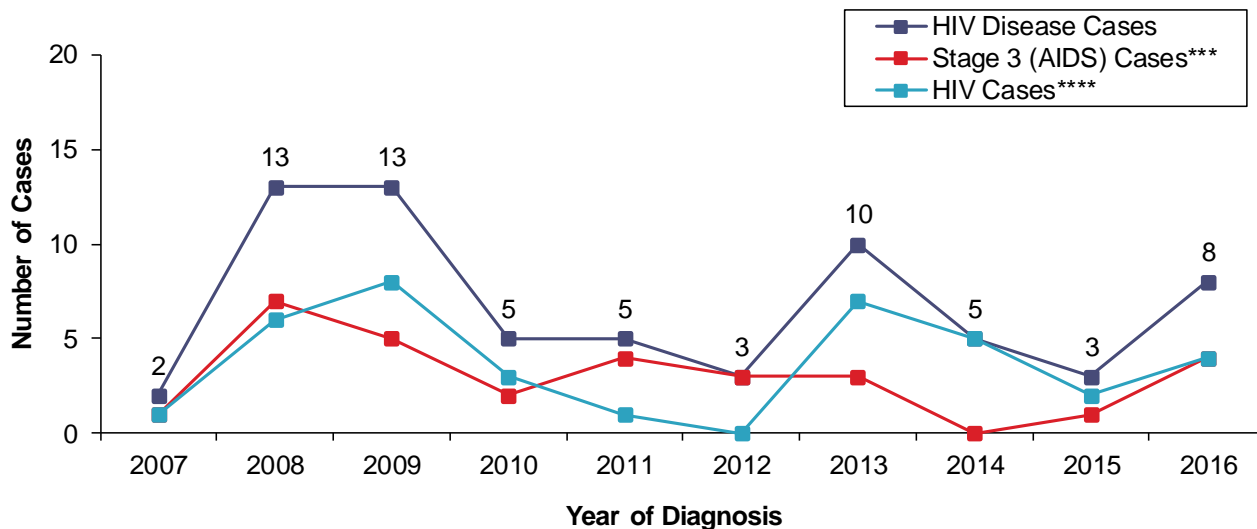
*HIV case vs. stage 3 (AIDS) case

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, Northwest HIV Care Region, 2007-2016**



*HIV case vs. stage 3 (AIDS) case.

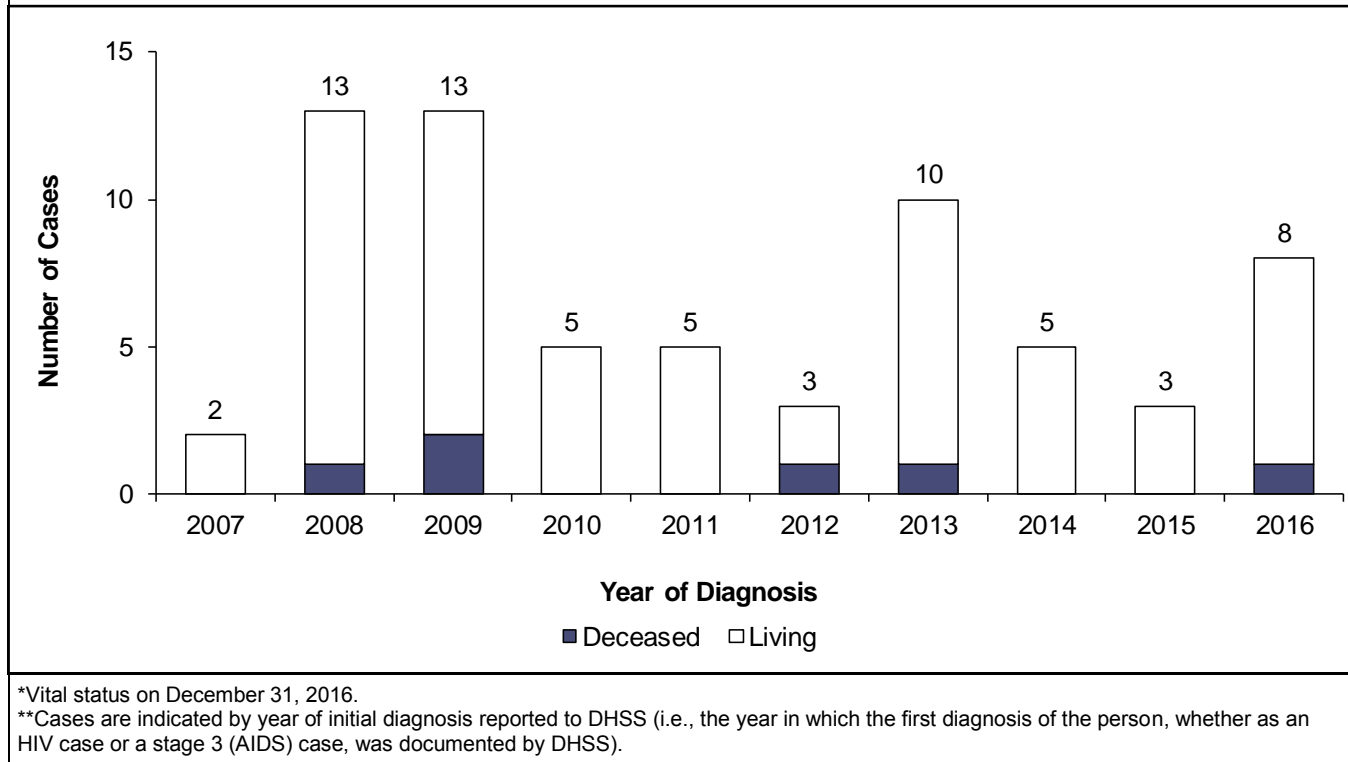
**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

The number of new diagnoses generally remained stable since 2007 with the exception of increases observed from 2007 to 2009 and from 2012 to 2013. Differences in the number of persons sub-classified as stage 3 (AIDS) cases each year are due to the progression of the disease over time.

Figure 5. Persons diagnosed with HIV disease by current vital status* and year of diagnosis, Northwest HIV Care Region, 2007-2016**



Of the two persons diagnosed with HIV disease in 2007, both were alive by the end of 2016 (Figure 5). Of the eight individuals first diagnosed in 2016, one was deceased by the end of 2016. Due to low overall numbers of new cases for each year, trends in HIV disease deaths are not stable.

Table 1. Living[†] HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Northwest HIV Care Region, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	46	86.8%	40.8	70	76.9%	62.2	116	80.6%	103.0
Female	7	13.2%	6.3	21	23.1%	18.8	28	19.4%	25.1
Total	53	100.0%	23.6	91	100.0%	40.6	144	100.0%	64.2
Race/Ethnicity									
White	44	83.0%	21.9	57	62.6%	28.3	101	70.1%	50.2
Black/African American	6	11.3%	71.0	31	34.1%	366.6	37	25.7%	437.6
Hispanic	3	5.7%	37.7	2	2.2%	25.1	5	3.5%	62.8
Asian/Pacific Islander	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	0	0.0%	--	1	1.1%	--	1	0.7%	--
Total	53	100.0%	23.6	91	100.0%	40.6	144	100.0%	64.2
Race/Ethnicity-Males									
White Male	38	82.6%	38.2	45	64.3%	45.3	83	71.6%	83.5
Black/African American Male	5	10.9%	89.7	23	32.9%	412.8	28	24.1%	502.5
Hispanic Male	3	6.5%	68.7	2	2.9%	45.8	5	4.3%	114.5
Asian/Pacific Islander Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	46	100.0%	40.8	70	100.0%	62.2	116	100.0%	103.0
Race/Ethnicity-Females									
White Female	6	85.7%	5.9	12	57.1%	11.8	18	64.3%	17.7
Black/African American Female	1	14.3%	34.7	8	38.1%	277.4	9	32.1%	312.1
Hispanic Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	1	4.8%	--	1	3.6%	--
Total	7	100.0%	6.3	21	100.0%	18.8	28	100.0%	25.1
Current Age[†]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	0	0.0%	0.0	1	1.1%	5.9	1	0.7%	5.9
19-24	5	9.4%	24.0	0	0.0%	0.0	5	3.5%	24.0
25-44	26	49.1%	48.1	24	26.4%	44.4	50	34.7%	92.5
45-64	15	28.3%	25.7	59	64.8%	101.2	74	51.4%	126.9
65+	7	13.2%	18.1	7	7.7%	18.1	14	9.7%	36.1
Total	53	100.0%	23.6	91	100.0%	40.6	144	100.0%	64.2

[†]Includes persons diagnosed with HIV disease in the Northwest HIV Care Region who are currently living, regardless of current residence.

*Cases which remained HIV cases at the end of 2016.

**Cases classified as stage 3 (AIDS) by December 31, 2016.

***The sum of HIV cases and stage 3 (AIDS) cases.

****Per 100,000 population based on 2015 DHSS estimates.

[†]Based on age as of December 31, 2016.

Note: Percentages may not total 100% due to rounding.

Table 2. Diagnosed HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Northwest HIV Care Region, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	4	100.0%	3.6	3	300.0%	2.7	7	87.5%	6.2
Female	0	0.0%	0.0	1	100.0%	0.9	1	12.5%	0.9
Total	4	100.0%	1.8	4	400.0%	1.8	8	100.0%	3.6
Race/Ethnicity									
White	3	75.0%	1.5	3	300.0%	1.5	6	75.0%	3.0
Black/African American	1	25.0%	11.8	0	0.0%	0.0	1	12.5%	11.8
Hispanic	0	0.0%	0.0	1	100.0%	12.6	1	12.5%	12.6
Asian/Pacific Islander	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	--
Total	4	100.0%	1.8	4	400.0%	1.8	8	100.0%	3.6
Race/Ethnicity-Males									
White Male	3	75.0%	3.0	2	200.0%	2.0	5	71.4%	5.0
Black/African American Male	1	25.0%	17.9	0	0.0%	0.0	1	14.3%	17.9
Hispanic Male	0	0.0%	0.0	1	100.0%	22.9	1	14.3%	22.9
Asian/Pacific Islander Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Total	4	100.0%	3.6	3	300.0%	2.7	7	100.0%	6.2
Race/Ethnicity-Females									
White Female	0	--	0.0	1	100.0%	1.0	1	100.0%	1.0
Black/African American Female	0	--	0.0	0	0.0%	0.0	0	0.0%	0.0
Hispanic Female	0	--	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander Female	0	--	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	--	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	--	0.0	0	0.0%	0.0	0	0.0%	--
Total	0	--	0.0	1	100.0%	0.9	1	100.0%	0.9
Current Age[†]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	0	0.0%	0.0	1	100.0%	5.9	1	12.5%	5.9
19-24	2	50.0%	9.6	0	0.0%	0.0	2	25.0%	9.6
25-44	1	25.0%	1.8	2	200.0%	3.7	3	37.5%	5.5
45-64	1	25.0%	1.7	0	0.0%	0.0	1	12.5%	1.7
65+	0	0.0%	0.0	1	100.0%	2.6	1	12.5%	2.6
Total	4	100.0%	1.8	4	400.0%	1.8	8	100.0%	3.6

*HIV cases diagnosed during 2016 which remained HIV cases at the end of the year.

**Stage 3 (AIDS) cases initially diagnosed in 2016.

***The sum of newly diagnosed HIV cases and newly diagnosed stage 3 (AIDS) cases. Does not include cases diagnosed prior to 2016 with HIV, which progressed to stage 3 (AIDS) in 2016.

****Per 100,000 population based on 2015 DHSS estimates.

†Based on age as of December 31, 2016.

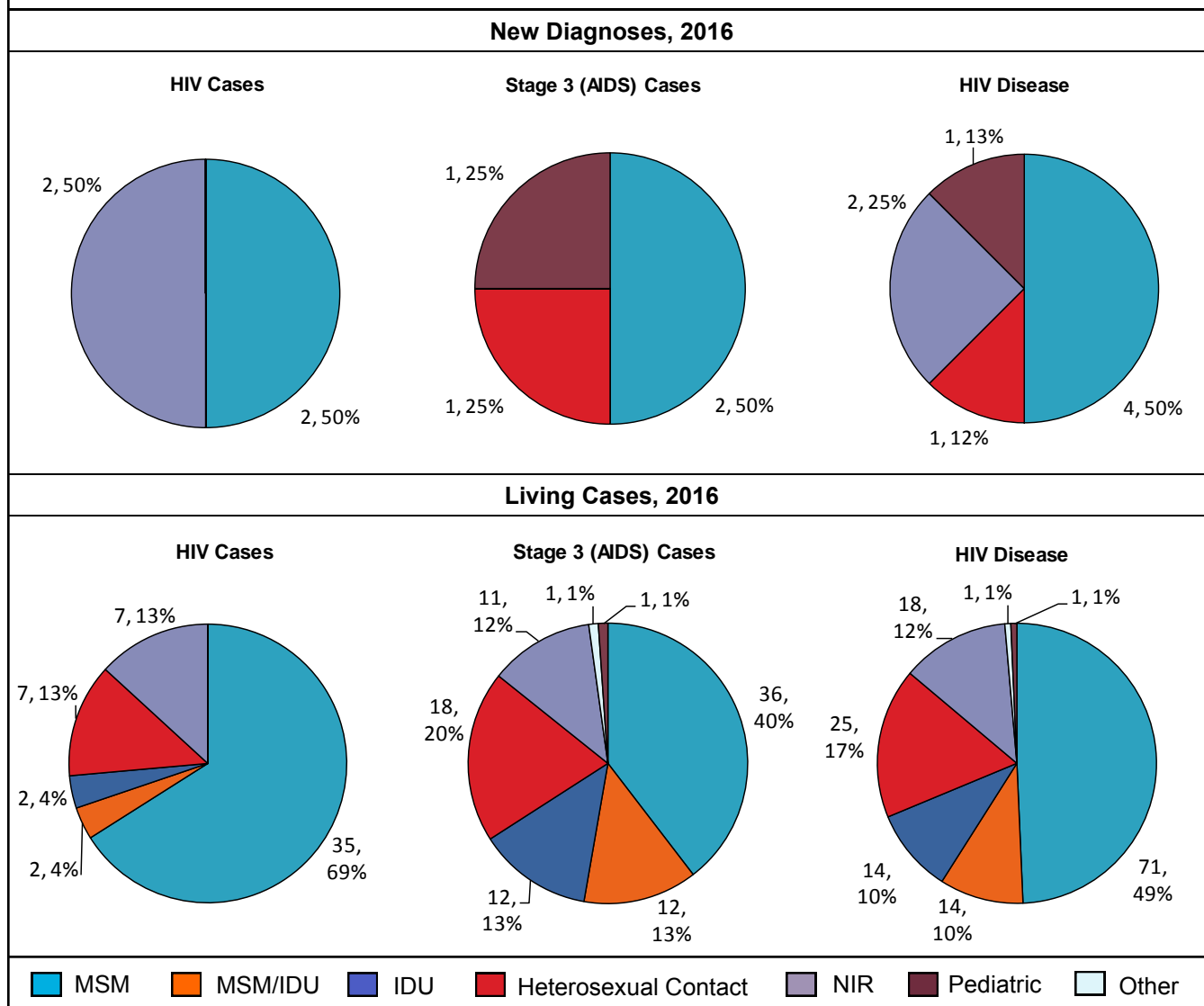
Note: Percentages may not total 100% due to rounding.

Epi Profiles Summary: Northwest HIV Care Region

Of the 144 persons living with HIV disease at the end of 2016, 81% were males (Table 1). The rate of those living with HIV disease among males was 4.1 times as high as the rate among females. Although whites represented the largest proportion of living HIV disease cases (70%), the rate of those living with HIV disease among blacks/African Americans was 8.7 times as high as the rate among whites. The rate among Hispanics was 1.3 times as high as the rate among whites. However, the number of Hispanics living with HIV disease was small and the results should be interpreted with caution. Blacks/African Americans comprised a larger proportion of females living with HIV disease (32%) compared to males (24%). The greatest proportion of living HIV disease cases was among individuals 45 to 64 years old at the end of 2016 (51%).

Of the eight persons newly diagnosed with HIV disease in 2016, four were classified as stage 3 (AIDS) cases by the end of 2016 (Table 2). The majority of all new HIV disease cases diagnosed occurred among white males (63%). The largest numbers of new HIV disease cases were among individuals 25 to 44 years of age (38%).

Figure 6. Diagnosed and living HIV, stage 3 (AIDS), and HIV disease cases, by exposure category, Northwest HIV Care Region, 2016



Among living HIV disease cases, the greatest proportion of cases with a known risk factor were attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and stage 3 (AIDS) cases and rates, by geographic area, Northwest HIV Care Region, 2016

Geographic Area	HIV Cases						Stage 3 (AIDS) Cases					
	Diagnosed 2016*			Living			Diagnosed 2016**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Buchanan County	3	75.0%	3.4	36	67.9%	40.4	3	75.0%	3.4	53	58.2%	59.5
Andrew County	0	0.0%	0.0	1	1.9%	5.8	0	0.0%	0.0	2	2.2%	11.6
Caldwell County	0	0.0%	0.0	1	1.9%	11.1	0	0.0%	0.0	4	4.4%	44.4
Nodaway County	0	0.0%	0.0	4	7.5%	17.5	0	0.0%	0.0	4	4.4%	17.5
Remainder of Region	1	25.0%	1.2	11	20.8%	12.8	1	25.0%	1.2	28	30.8%	32.6
NORTHWEST HIV CARE REGION	4	100.0%	1.8	53	100.0%	23.6	4	100.0%	1.8	91	100.0%	40.6
*HIV cases diagnosed and reported to DHSS during 2016 which remained HIV cases at the end of the year. **Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016. ***Per 100,000 population based on 2015 DHSS estimates. Note: Percentages may not total 100% due to rounding.												

The greatest proportions of living HIV disease cases were diagnosed in Buchanan County (Table 3). In Buchanan County, 58% of living HIV disease cases progressed to stage 3 (AIDS) by the end of 2016. The rates of individuals living with HIV and stage 3 (AIDS) were also greatest in Buchanan County.

Table 4. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men, by selected race/ethnicity, Northwest HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	2	100.0%	31	88.6%	1	50.0%	26	72.2%
Black/African American	0	0.0%	3	8.6%	0	0.0%	9	25.0%
Hispanic	0	0.0%	1	2.9%	1	50.0%	1	2.8%
Other/Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%
NORTHWEST HIV CARE REGION TOTAL	2	100.0%	35	100.0%	2	100.0%	36	100.0%
*Remained HIV cases at the end of the year.								
**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.								
Note: Percentages may not total 100% due to rounding.								

Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity and current age group, Northwest HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	3	5.3%	1	8.3%	0	0.0%	4	5.6%
25-44	16	28.1%	5	41.7%	2	100.0%	23	32.4%
45-64	27	47.4%	6	50.0%	0	0.0%	33	46.5%
65+	11	19.3%	0	0.0%	0	0.0%	11	15.5%
NORTHWEST HIV CARE REGION TOTAL	57	100.0%	12	100.0%	2	100.0%	71	100.0%
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.								
**Percentage of cases per age group.								
Note: Percentages may not total 100% due to rounding.								

Table 6. Living HIV disease cases in men who have sex with men, by geographic area, Northwest HIV Care Region, 2016

Geographic Area	Cases	%
Buchanan County	48	67.6%
Remaining Counties	23	32.4%
NORTHWEST HIV CARE REGION TOTAL	71	100.0%
Note: Percentages may not total 100% due to rounding.		

Four new HIV disease diagnoses were attributed to MSM in 2016 for the Northwest HIV Care Region (Table 4). There were 71 living HIV disease cases attributed to MSM in the Northwest HIV Care Region. Whites represented 89% of living HIV cases and 72% of living stage 3 (AIDS) cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 5). Among white MSM living with HIV disease, the greatest proportion was between 45 and 64 years of age at the end of 2016. The greatest proportions of black/African American MSM living with HIV disease were 45 to 64 years of age, followed by 25 to 44 years of age.

Buchanan County residents accounted for the largest number of living MSM in the Northwest HIV Care Region (Table 6).

Table 7. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men and inject drugs, by selected race/ethnicity, Northwest HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	0	--	2	100.0%	0	--	8	66.7%
Black/African American	0	--	0	0.0%	0	--	4	33.3%
Hispanic	0	--	0	0.0%	0	--	0	0.0%
Other/Unknown	0	--	0	0.0%	0	--	0	0.0%
NORTHWEST HIV CARE REGION TOTAL	0	--	2	100.0%	0	--	12	100.0%

*Remained HIV cases at the end of the year.
 **Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.
 Note: Percentages may not total 100% due to rounding.

Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity and current age group, Northwest HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	--	0	0.0%
19-24	0	0.0%	0	0.0%	0	--	0	0.0%
25-44	3	30.0%	0	0.0%	0	--	3	21.4%
45-64	6	60.0%	4	100.0%	0	--	10	71.4%
65+	1	10.0%	0	0.0%	0	--	1	7.1%
NORTHWEST HIV CARE REGION TOTAL	10	100.0%	4	100.0%	0	--	14	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.
 **Percentage of cases per age group.
 Note: Percentages may not total 100% due to rounding.

Table 9. Living HIV disease cases in men who have sex with men and inject drugs, Northwest HIV Care Region, 2016

Geographic Area	Cases	%
NORTHWEST HIV CARE REGION TOTAL	14	100.0%

No new HIV disease diagnoses were attributed to MSM/IDU in 2016 for the Northwest HIV Care Region (Table 7). There were 14 MSM/IDU living with HIV disease at the end of 2016 whose most recent diagnosis occurred in the Northwest HIV Care Region. Whites represented the majority (71%) of living HIV and stage 3 (AIDS) cases.

Overall, the majority of MSM/IDU living with HIV disease (71%) were between 45 and 64 years of age at the end of 2016 (Table 8).

Table 10. Newly diagnosed and living HIV and stage 3 (AIDS) cases in injection drug users, by selected race/ethnicity and sex, Northwest HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	0	0.0%	0	--	5	41.7%
Black/African American Male	0	--	0	0.0%	0	--	3	25.0%
Hispanic Male	0	--	1	50.0%	0	--	0	0.0%
White Female	0	--	1	50.0%	0	--	3	25.0%
Black/African American Female	0	--	0	0.0%	0	--	0	0.0%
Hispanic Female	0	--	0	0.0%	0	--	0	0.0%
NORTHWEST HIV CARE REGION TOTAL[†]	0	--	2	100.0%	0	--	12	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

[†]Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 11. Living HIV disease cases in injection drug users, by selected race/ethnicity and current age group, Northwest HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	--	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	--	0	0.0%
25-44	1	20.0%	1	33.3%	2	50.0%	0	--	5	35.7%
45-64	4	80.0%	2	66.7%	2	50.0%	0	--	9	64.3%
65+	0	0.0%	0	0.0%	0	0.0%	0	--	0	0.0%
NORTHWEST HIV CARE REGION TOTAL	5	100.0%	3	100.0%	4	100.0%	0	--	14	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 12. Living HIV disease cases in injection drug users, Northwest HIV Care Region, 2016

Geographic Area	Cases	%
NORTHWEST HIV CARE REGION TOTAL	14	100.0%

No new HIV disease diagnoses were attributed to IDU in 2016 for the Northwest HIV Care Region (Table 10). There were 14 living HIV disease cases attributed to IDU at the end of 2016 in the Northwest HIV Care Region. Of the living HIV disease cases, 86% were classified as stage 3 (AIDS) at the end of 2016. Males represented all but three of the living cases among IDU.

Among IDU living with HIV disease, the majority (64%) were 45 to 64 years of age at the end of 2016 (Table 11).

Table 13. Newly diagnosed and living HIV and stage 3 (AIDS) cases in heterosexual contacts, by selected race/ethnicity and sex, Northwest HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	1	14.3%	0	0.0%	1	5.6%
Black/African American Male	0	--	0	0.0%	0	0.0%	4	22.2%
Hispanic Male	0	--	0	0.0%	0	0.0%	0	0.0%
White Female	0	--	5	71.4%	1	100.0%	7	38.9%
Black/African American Female	0	--	1	14.3%	0	0.0%	6	33.3%
Hispanic Female	0	--	0	0.0%	0	0.0%	0	0.0%
NORTHWEST HIV CARE REGION TOTAL[†]	0	--	7	100.0%	1	100.0%	18	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

[†]Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex and current age group, Northwest HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25-44	0	0.0%	3	75.0%	6	50.0%	3	42.9%	12	48.0%
45-64	1	50.0%	1	25.0%	5	41.7%	4	57.1%	11	44.0%
65+	1	50.0%	0	0.0%	1	8.3%	0	0.0%	2	8.0%
NORTHWEST HIV CARE REGION TOTAL	2	100.0%	4	100.0%	12	100.0%	7	100.0%	25	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

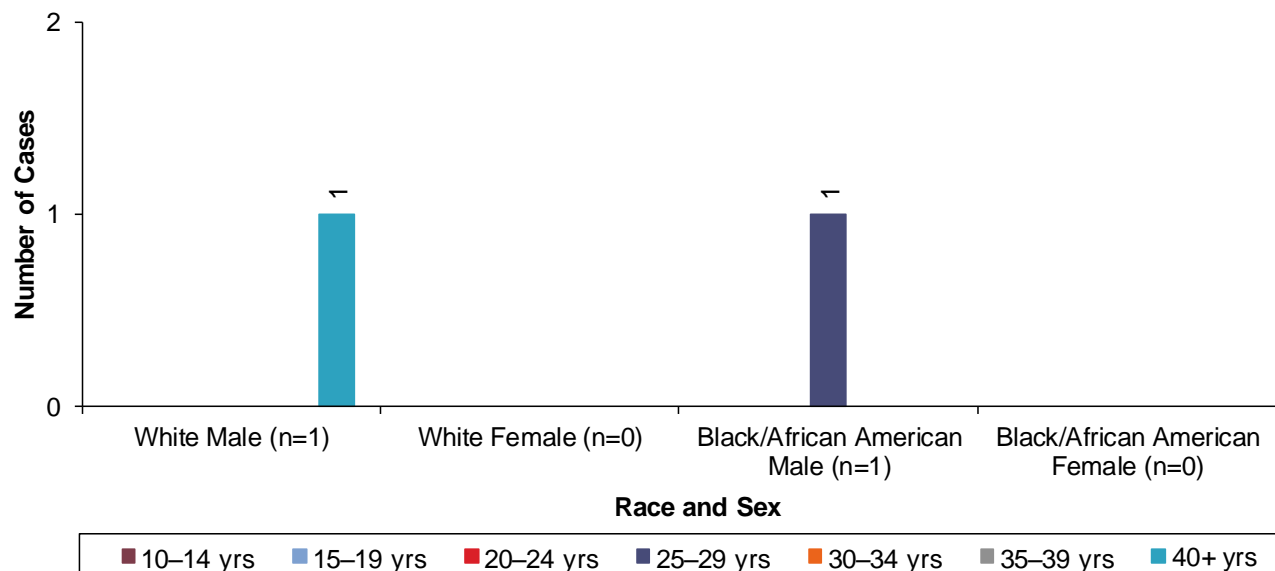
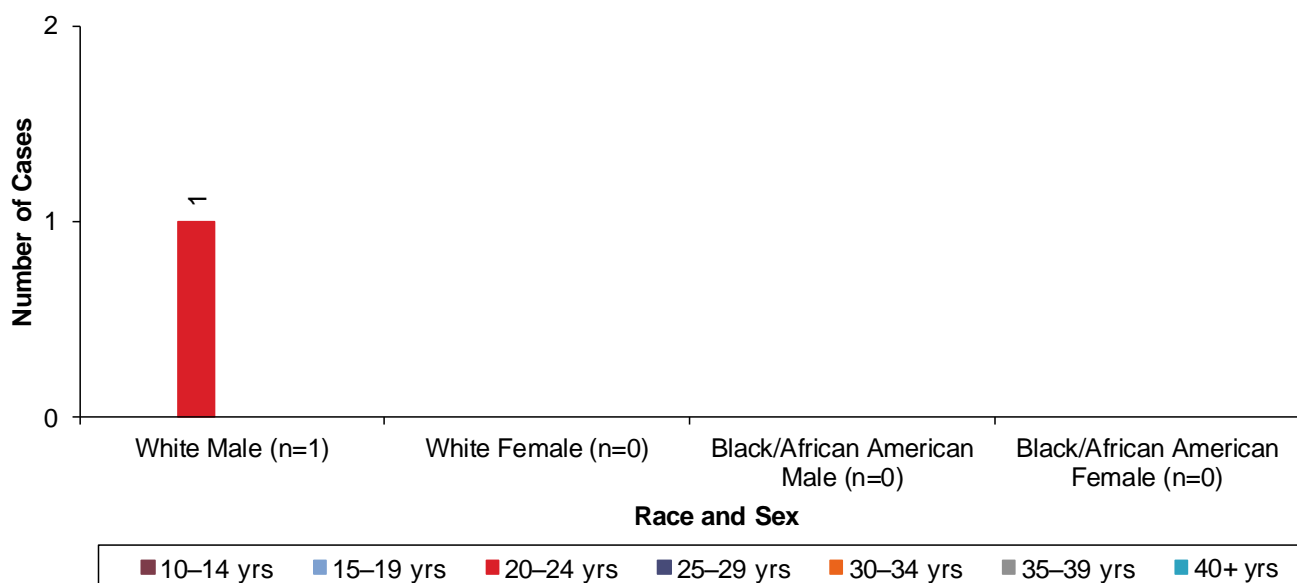
Table 15. Living HIV disease cases in heterosexual contacts, by geographic area, Northwest HIV Care Region, 2016

Geographic Area	Total	
	Cases	%
Buchanan County	17	68.0%
Remaining Counties	8	32.0%
NORTHWEST HIV CARE REGION TOTAL	25	100.0%

Note: Percentages may not total 100% due to rounding.

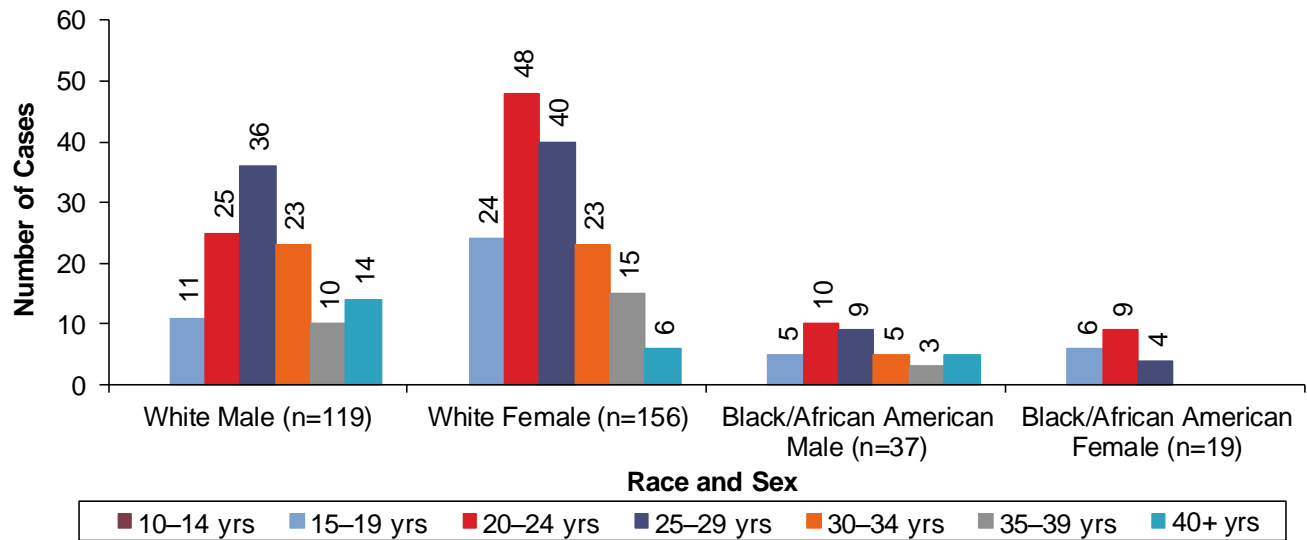
One new HIV disease diagnosis was attributed to heterosexual contact in 2016 for the Northwest HIV Care Region (Table 13). There were 25 living HIV disease cases attributed to heterosexual contact at the end of 2016 in the Northwest HIV Care Region. Of the living cases, 72% were classified as stage 3 (AIDS) at the end of 2016. Females represented 78% of the living HIV disease cases.

At the end of 2016, persons 25 to 44 years of age comprised the largest number of heterosexual contact cases living with HIV disease in the Northwest HIV Care Region (Table 14).

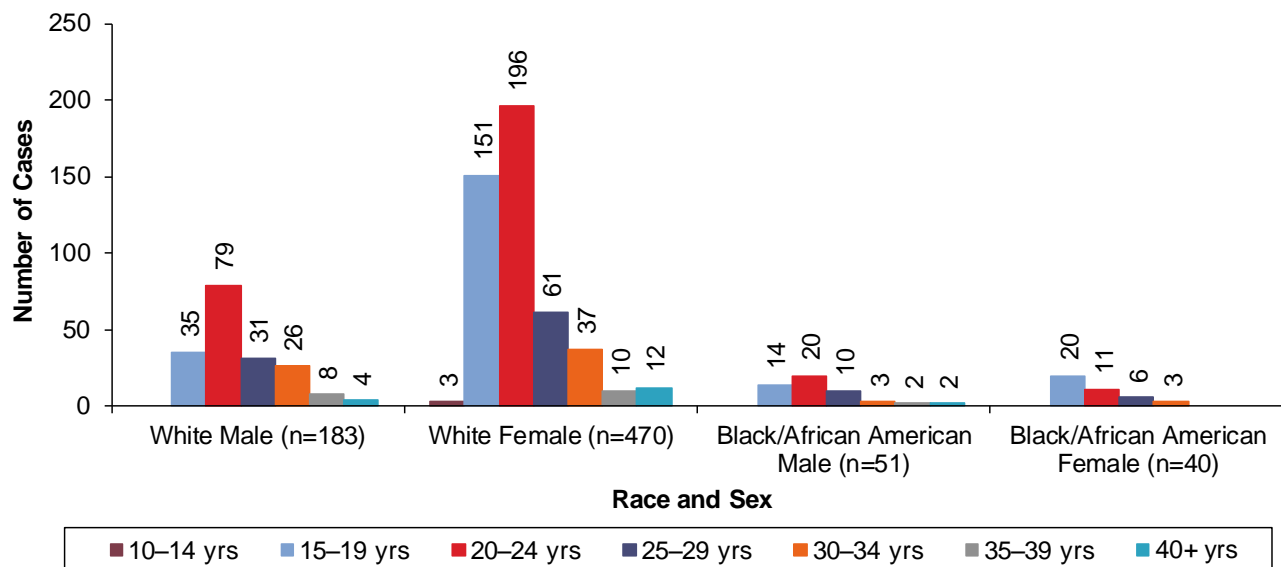
Figure 7. Reported P&S syphilis cases, by race and sex and age group at diagnosis, Northwest HIV Care Region, 2016**Figure 8. Reported early latent syphilis cases, by race and sex and age group at diagnosis, Northwest HIV Care Region, 2016**

The only reported P&S cases were reported among white males (1) and black/African American males (1) in 2016 in the Northwest HIV Care Region (Figure 7). There were no cases reported among females. From 2015 to 2016, the number of P&S syphilis cases decreased equally among black/African American males and white males (3 to 1).

The only reported early latent case reported in 2016 was a white male between 20 and 24 years of age. From 2015 to 2016, the number of early latent cases decreased among white males (2 to 1), white females (2 to 0), and black/African American males (1 to 0).

Figure 9. Reported gonorrhea cases, by race and sex and age group at diagnosis, Northwest HIV Care Region, 2016

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

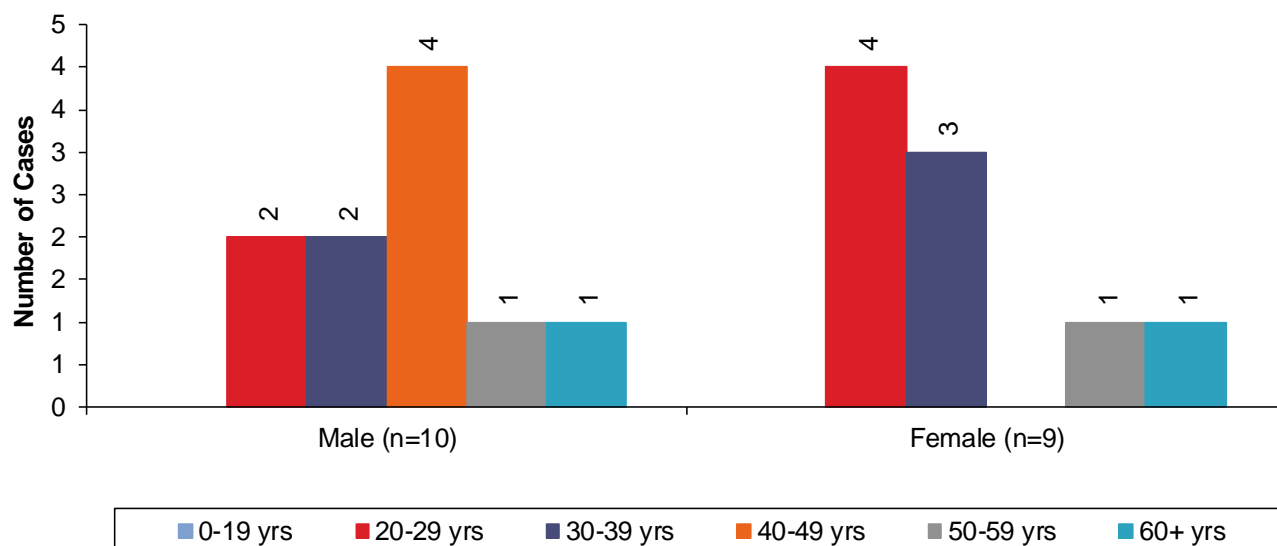
Figure 10. Reported chlamydia cases, by race and sex and age group at diagnosis, Northwest HIV Care Region, 2016

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest numbers of gonorrhea cases were reported among white females (156), followed by white males (119) (Figure 9). Among white males, the largest numbers of reported cases were diagnosed between 25 and 29 years of age. Among white females, black/African American females, and black males, the largest numbers of reported cases were diagnosed between 20 and 24 years of age.

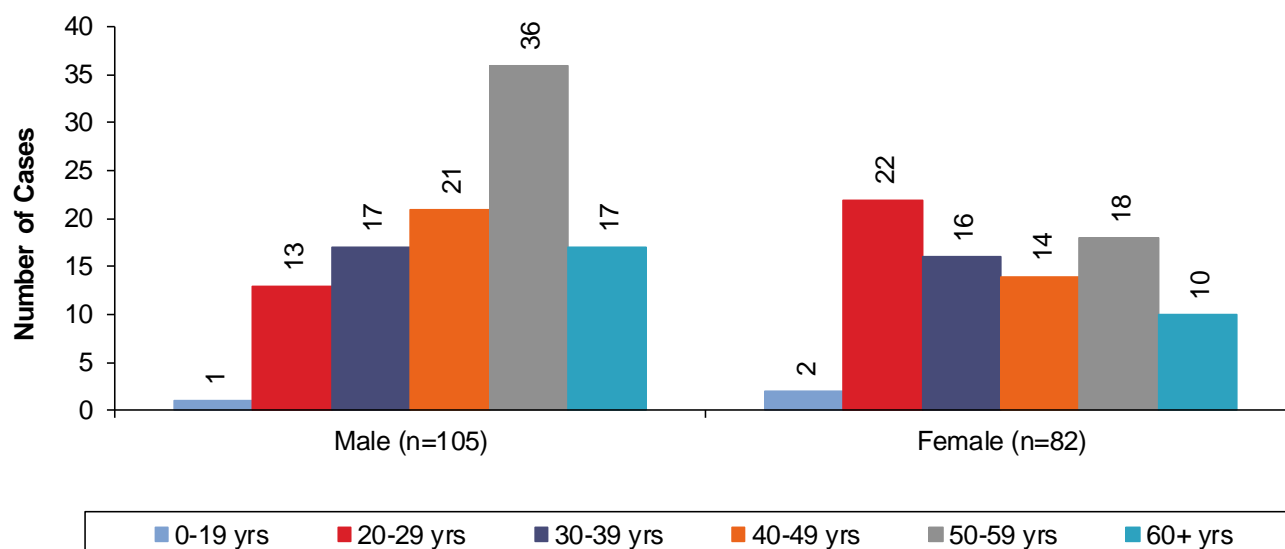
The largest numbers of chlamydia cases were reported among white females (470) and white males (183) (Figure 10). Among white males, white females, and black/African American males, the largest numbers of reported cases were diagnosed between 20 and 24 years of age. Among black/African American females, the largest numbers of reported cases were between 15 and 19 years of age.

Figure 11. Reported hepatitis B cases, by sex and age group at diagnosis, Northwest HIV Care Region, 2016



Note: Totals include persons whose age at diagnosis is unknown.

Figure 12. Reported hepatitis C cases, by sex and age group at diagnosis, Northwest HIV Care Region, 2016

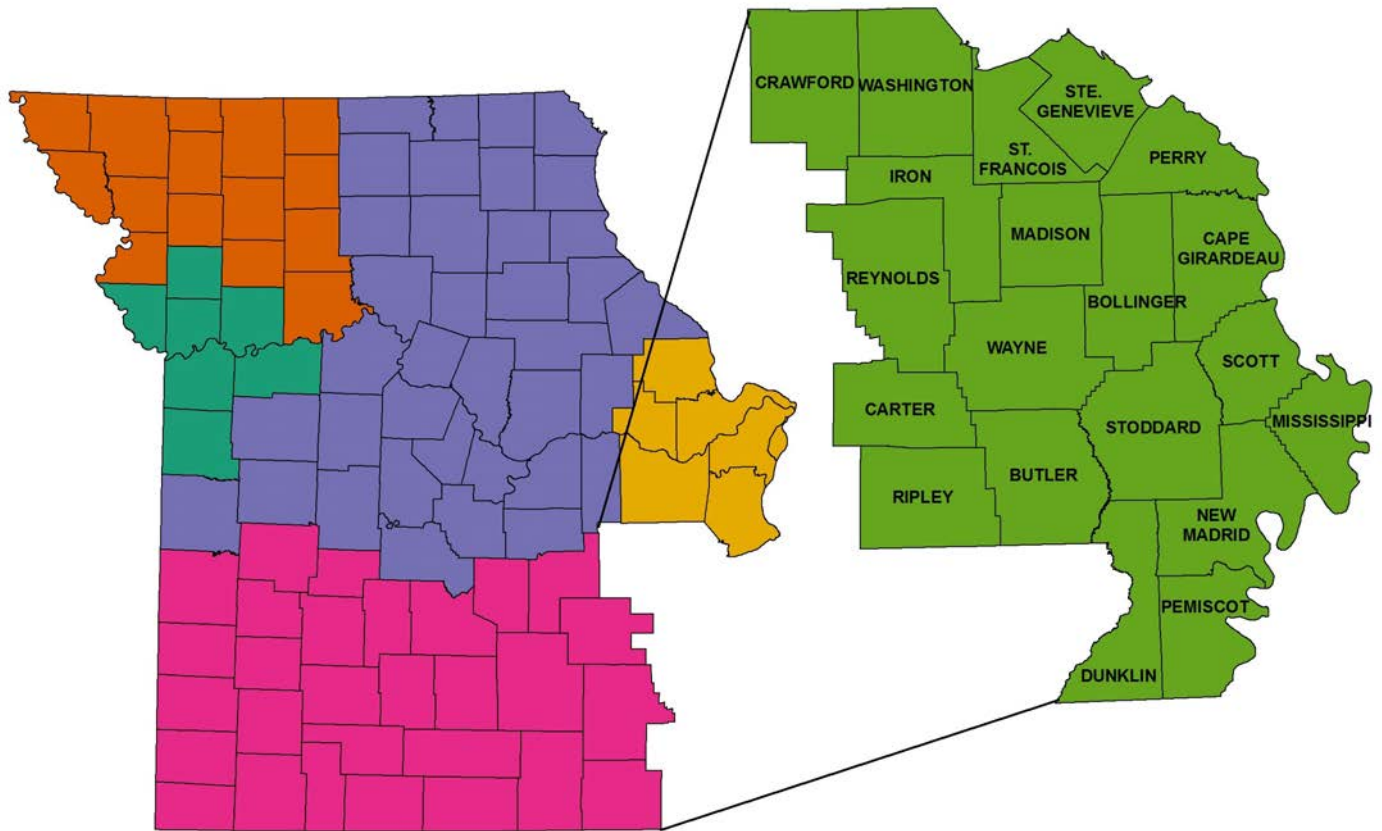


Note: Totals include persons whose age at diagnosis is unknown.

There were 19 reported cases of hepatitis B in the Northwest HIV Care Region during 2016 (Figure 11). Males represented 53% of reported hepatitis B cases. Among males, the largest numbers of reported cases were between 40 and 49 years of age. The largest numbers of reported cases among females were between 20 and 29 years of age.

In 2016, there were 187 hepatitis C cases reported in the Northwest HIV Care Region (Figure 12). Of the reported hepatitis C cases, 56% were male. The largest numbers of reported cases were between 50 and 59 years of age among males and between 20 and 29 years of age among females.

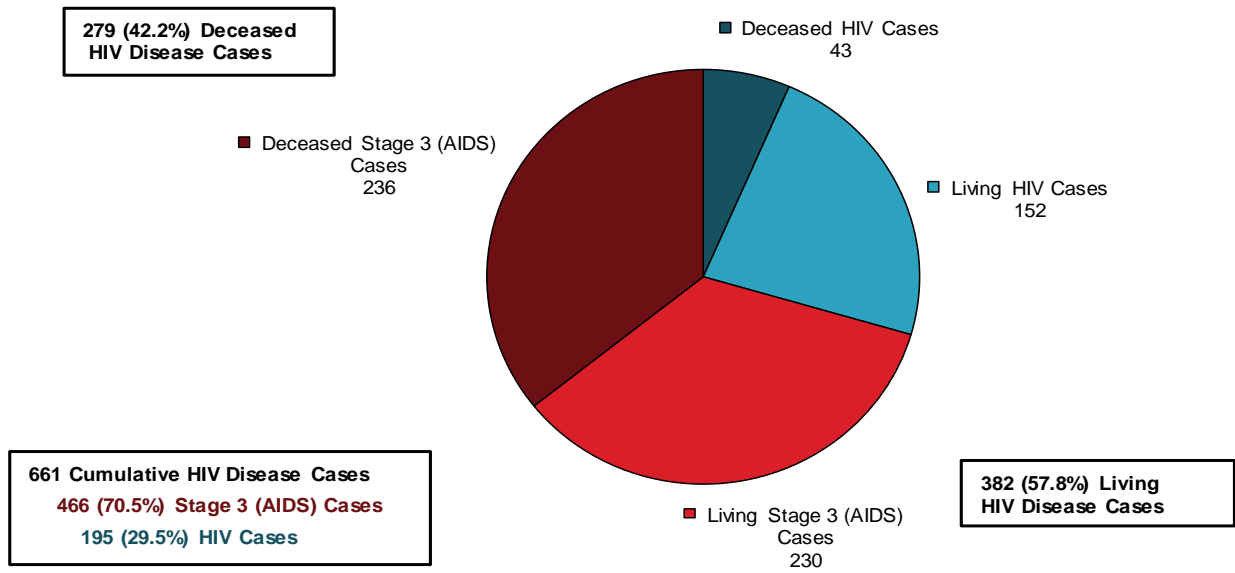
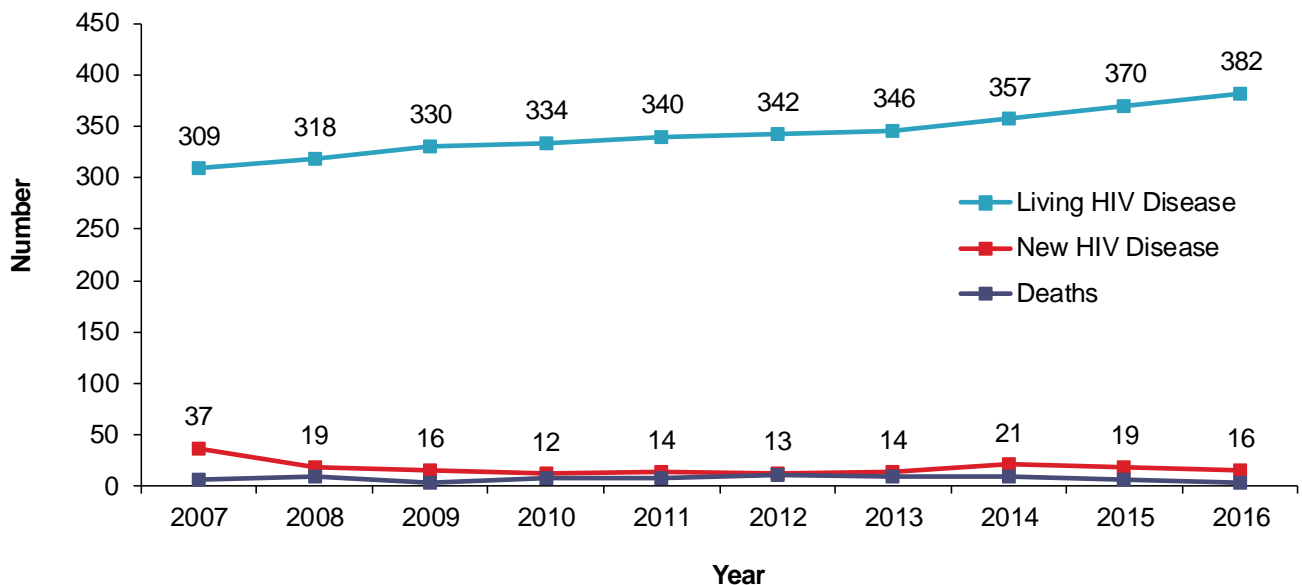
SOUTHEAST HIV CARE REGION



Population Counts, Southeast HIV Care Region, 2015

County	White		Black/African American		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races/Other Race		Total
Bollinger County	11,777	96.7%	49	0.4%	123	1.0%	29	0.2%	79	0.6%	125	1.0%	12,182
Butler County	38,158	88.8%	2,407	5.6%	811	1.9%	330	0.8%	257	0.6%	988	2.3%	42,951
Cape Girardeau County	67,857	86.4%	5,993	7.6%	1,855	2.4%	1,226	1.6%	204	0.3%	1,437	1.8%	78,572
Carter County	5,941	94.9%	29	0.5%	121	1.9%	10	0.2%	66	1.1%	96	1.5%	6,263
Crawford County	23,440	95.6%	119	0.5%	471	1.9%	94	0.4%	102	0.4%	300	1.2%	24,526
Dunklin County	25,109	81.3%	3,158	10.2%	1,949	6.3%	102	0.3%	85	0.3%	492	1.6%	30,895
Iron County	9,527	94.1%	159	1.6%	181	1.8%	13	0.1%	74	0.7%	171	1.7%	10,125
Madison County	11,723	94.5%	58	0.5%	293	2.4%	150	1.2%	48	0.4%	136	1.1%	12,408
Mississippi County	10,105	72.0%	3,420	24.4%	280	2.0%	27	0.2%	41	0.3%	163	1.2%	14,036
New Madrid County	14,561	80.0%	2,882	15.8%	321	1.8%	94	0.5%	41	0.2%	309	1.7%	18,208
Pemiscot County	12,018	68.7%	4,653	26.6%	423	2.4%	60	0.3%	62	0.4%	266	1.5%	17,482
Perry County	18,264	95.2%	94	0.5%	433	2.3%	154	0.8%	61	0.3%	177	0.9%	19,183
Reynolds County	6,074	94.4%	52	0.8%	99	1.5%	13	0.2%	53	0.8%	141	2.2%	6,432
Ripley County	13,150	95.3%	91	0.7%	179	1.3%	48	0.3%	126	0.9%	208	1.5%	13,802
Scott County	32,627	83.6%	4,538	11.6%	902	2.3%	186	0.5%	105	0.3%	650	1.7%	39,008
St. Francois County	61,228	92.0%	3,028	4.6%	987	1.5%	322	0.5%	240	0.4%	715	1.1%	66,520
Ste. Genevieve County	16,933	94.5%	154	0.9%	204	1.1%	384	2.1%	54	0.3%	190	1.1%	17,919
Stoddard County	28,501	95.4%	335	1.1%	538	1.8%	86	0.3%	96	0.3%	306	1.0%	29,862
Washington County	23,382	94.3%	596	2.4%	317	1.3%	68	0.3%	118	0.5%	307	1.2%	24,788
Wayne County	12,801	95.5%	88	0.7%	191	1.4%	42	0.3%	64	0.5%	219	1.6%	13,405
Region Total	443,176	88.9%	31,903	6.4%	10,678	2.1%	3,438	0.7%	1,976	0.4%	7,396	1.5%	498,567

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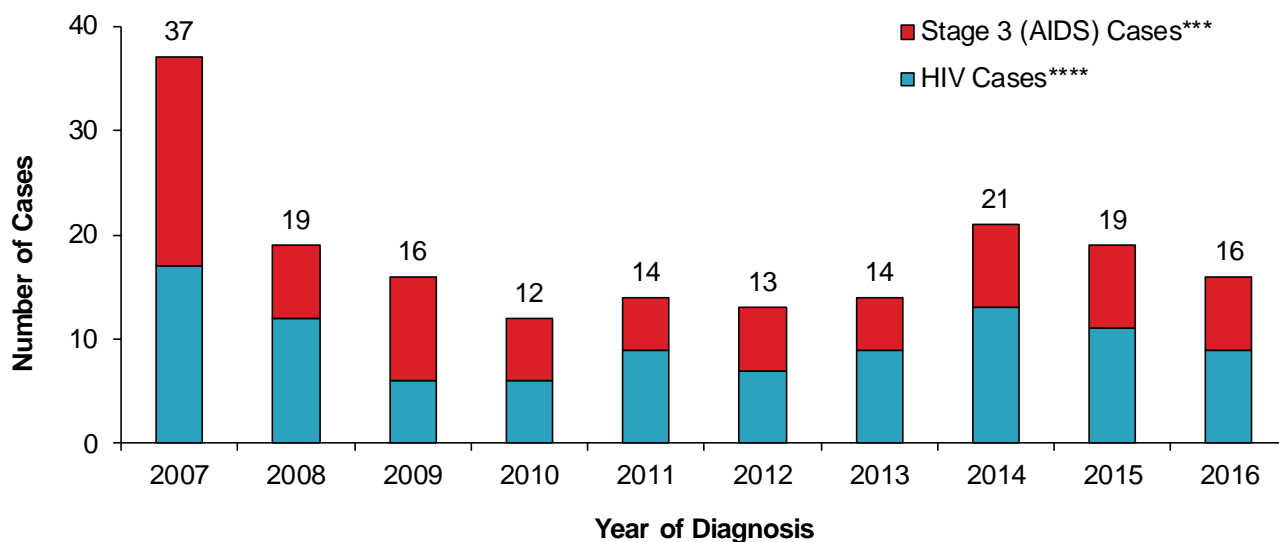
Figure 1. HIV disease cases (living and deceased), by current HIV vs. stage 3 (AIDS) status, Southeast HIV Care Region, 1982-2016**Figure 2. Living and new HIV disease cases and deaths, by year*, Southeast HIV Care Region, 2007-2016**

*Living HIV disease cases represent the number of individuals living with HIV disease at the end of the year. New HIV disease cases represent the number of individuals newly diagnosed in the year. HIV disease deaths represent the number of individuals that died in the year.

From 1982 to 2016, a total of 661 HIV disease cases were diagnosed in the Southeast HIV Care Region and reported to DHSS (Figure 1). Of the cumulative cases reported, 58% were still presumed to be living with HIV disease at the end of 2016. Among those living with HIV disease, 152 were classified as HIV cases at the end of 2016 and 230 were classified as stage 3 (AIDS) cases.

At the end of 2016, there were 382 persons living with HIV disease whose most recent diagnosis occurred in the Southeast HIV Care Region (Figure 2). The number of people living with HIV disease generally increased over time. There were 16 new HIV disease diagnoses in 2016. The number of new diagnoses decreased from 2007 to 2008 and has been generally stable since 2008, other than a slight increase in 2014. The number of deaths among persons with HIV disease has remained generally stable.

Figure 3. HIV disease cases, by current status* and year of diagnosis, Southeast HIV Care Region, 2007-2016**



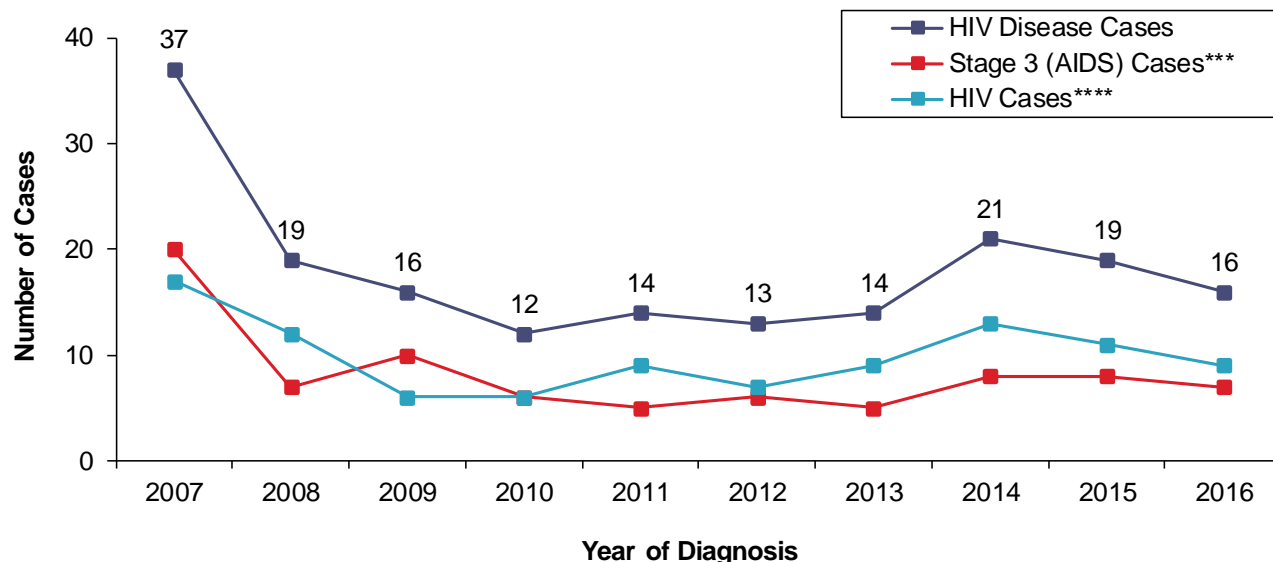
*HIV case vs. stage 3 (AIDS) case.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, Southeast HIV Care Region, 2007-2016**



*HIV case vs. stage 3 (AIDS) case.

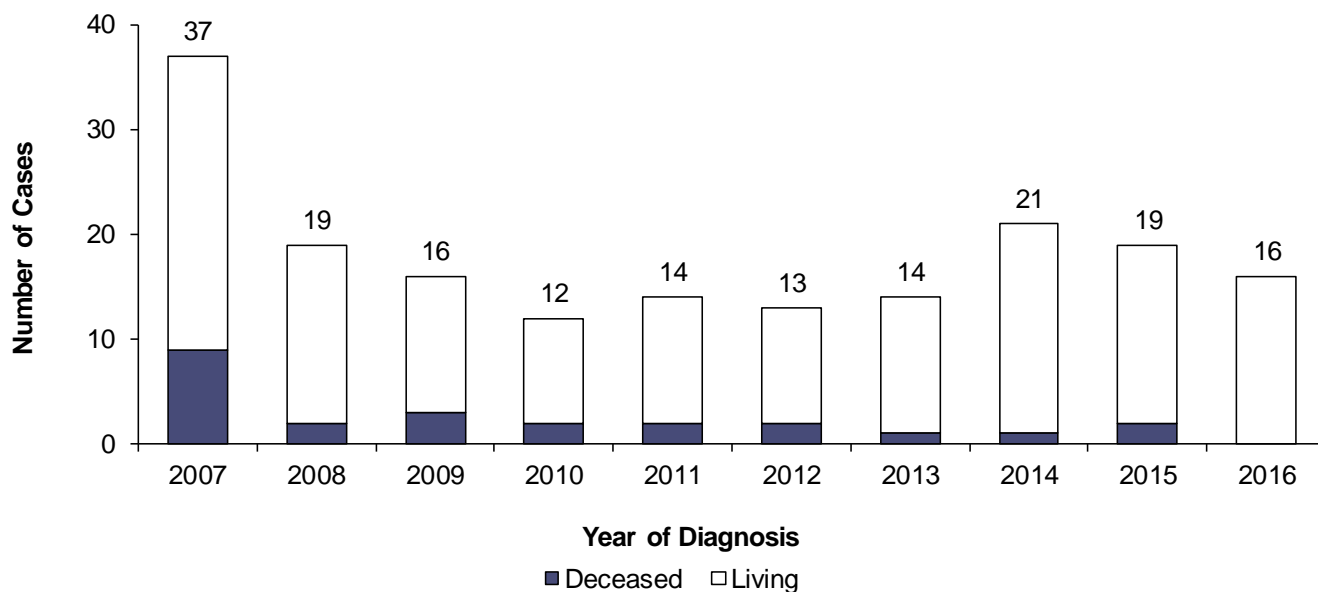
**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

The number of new diagnoses reported in the Southeast HIV Care Region decreased from 2007 to 2008 and has been generally stable since 2008, other than a slight increase in 2014 (Figure 4). Differences in the number of persons sub-classified as stage 3 (AIDS) cases each year are due to the progression of the disease over time.

Figure 5. Persons diagnosed with HIV disease, by current vital status* and year of diagnosis, Southeast HIV Care Region, 2007-2016**



*Vital status on December 31, 2016.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

Of the 37 persons diagnosed with HIV disease in 2007, nine (24%) were deceased by the end of 2016 (Figure 5). Among the 16 persons first diagnosed in 2016, no deaths had been reported to DHSS at the end of 2016. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease.

Table 1. Living[†] HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Southeast HIV Care Region, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	103	67.8%	41.5	171	74.3%	69.0	274	71.7%	110.5
Female	49	32.2%	19.6	59	25.7%	23.5	108	28.3%	43.1
Total	152	100.0%	30.5	230	100.0%	46.1	382	100.0%	76.6
Race/Ethnicity									
White	96	63.2%	21.7	136	59.1%	30.7	232	60.7%	52.3
Black/African American	49	32.2%	153.6	90	39.1%	282.1	139	36.4%	435.7
Hispanic	4	2.6%	37.5	2	0.9%	18.7	6	1.6%	56.2
Asian/Pacific Islander	2	1.3%	58.2	1	0.4%	29.1	3	0.8%	87.3
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	1	0.7%	--	1	0.4%	--	2	0.5%	--
Total	152	100.0%	30.5	230	100.0%	46.1	382	100.0%	76.6
Race/Ethnicity-Males									
White Male	66	64.1%	30.1	109	63.7%	49.8	175	63.9%	79.9
Black/African American Male	32	31.1%	186.9	59	34.5%	344.5	91	33.2%	531.4
Hispanic Male	3	2.9%	53.4	1	0.6%	17.8	4	1.5%	71.1
Asian/Pacific Islander Male	2	1.9%	126.6	1	0.6%	63.3	3	1.1%	189.9
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	0	0.0%	--	1	0.6%	--	1	0.4%	--
Total	103	100.0%	41.5	171	100.0%	69.0	274	100.0%	110.5
Race/Ethnicity-Females									
White Female	30	61.2%	13.4	27	45.8%	12.0	57	52.8%	25.4
Black/African American Female	17	34.7%	115.0	31	52.5%	209.8	48	44.4%	324.8
Hispanic Female	1	2.0%	19.8	1	1.7%	19.8	2	1.9%	39.6
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	1	2.0%	--	0	0.0%	--	1	0.9%	--
Total	49	100.0%	19.6	59	100.0%	23.5	108	100.0%	43.1
Current Age[†]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	3	2.0%	7.8	0	0.0%	0.0	3	0.8%	7.8
19-24	11	7.2%	28.3	6	2.6%	15.5	17	4.5%	43.8
25-44	77	50.7%	64.4	78	33.9%	65.2	155	40.6%	129.6
45-64	51	33.6%	38.1	134	58.3%	100.0	185	48.4%	138.0
65+	10	6.6%	11.6	12	5.2%	13.9	22	5.8%	25.5
Total	152	100.0%	30.5	230	100.0%	46.1	382	100.0%	76.6

[†]Includes persons diagnosed with HIV disease in the Southeast HIV Care Region who are currently living, regardless of current residence.

*Cases which remained HIV cases at the end of 2016.

**Cases classified as stage 3 (AIDS) by December 31, 2016.

***The sum of HIV cases and stage 3 (AIDS) cases.

****Per 100,000 population based on 2015 DHSS estimates.

[†]Based on age as of December 31, 2016.

Note: Percentages may not total 100% due to rounding.

Table 2. Diagnosed HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Southeast HIV Care Region, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	5	55.6%	2.0	5	71.4%	2.0	10	62.5%	4.0
Female	4	44.4%	1.6	2	28.6%	0.8	6	37.5%	2.4
Total	9	100.0%	1.8	7	100.0%	1.4	16	100.0%	3.2
Race/Ethnicity									
White	3	33.3%	0.7	5	71.4%	1.1	8	50.0%	1.8
Black/African American	4	44.4%	12.5	1	14.3%	3.1	5	31.3%	15.7
Hispanic	0	0.0%	0.0	1	14.3%	9.4	1	6.3%	9.4
Asian/Pacific Islander	1	11.1%	29.1	0	0.0%	0.0	1	6.3%	29.1
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	1	11.1%	--	0	0.0%	--	1	6.3%	--
Total	9	100.0%	1.8	7	100.0%	1.4	16	100.0%	3.2
Race/Ethnicity-Males									
White Male	2	40.0%	0.9	4	80.0%	1.8	6	60.0%	2.7
Black/African American Male	2	40.0%	11.7	1	20.0%	5.8	3	30.0%	17.5
Hispanic Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander Male	1	20.0%	63.3	0	0.0%	0.0	1	10.0%	63.3
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	5	100.0%	2.0	5	100.0%	2.0	10	100.0%	4.0
Race/Ethnicity-Females									
White Female	1	25.0%	0.4	1	50.0%	0.4	2	33.3%	0.9
Black/African American Female	2	50.0%	13.5	0	0.0%	0.0	2	33.3%	13.5
Hispanic Female	0	0.0%	0.0	1	50.0%	19.8	1	16.7%	19.8
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	1	25.0%	--	0	0.0%	--	1	16.7%	--
Total	4	100.0%	1.6	2	100.0%	0.8	6	100.0%	2.4
Current Age†									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	1	11.1%	2.6	0	0.0%	0.0	1	6.3%	2.6
19-24	0	0.0%	0.0	2	28.6%	5.2	2	12.5%	5.2
25-44	5	55.6%	4.2	4	57.1%	3.3	9	56.3%	7.5
45-64	3	33.3%	2.2	1	14.3%	0.7	4	25.0%	3.0
65+	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Total	9	100.0%	1.8	7	100.0%	1.4	16	100.0%	3.2

*HIV cases diagnosed during 2016 which remained HIV cases at the end of the year.

**Stage 3 (AIDS) cases initially diagnosed in 2016.

***The sum of newly diagnosed HIV cases and newly diagnosed stage 3 (AIDS) cases. Does not include cases diagnosed prior to 2016 with HIV, which progressed to stage 3 (AIDS) in 2016.

****Per 100,000 population based on 2015 DHSS estimates.

†Based on age as of December 31, 2016.

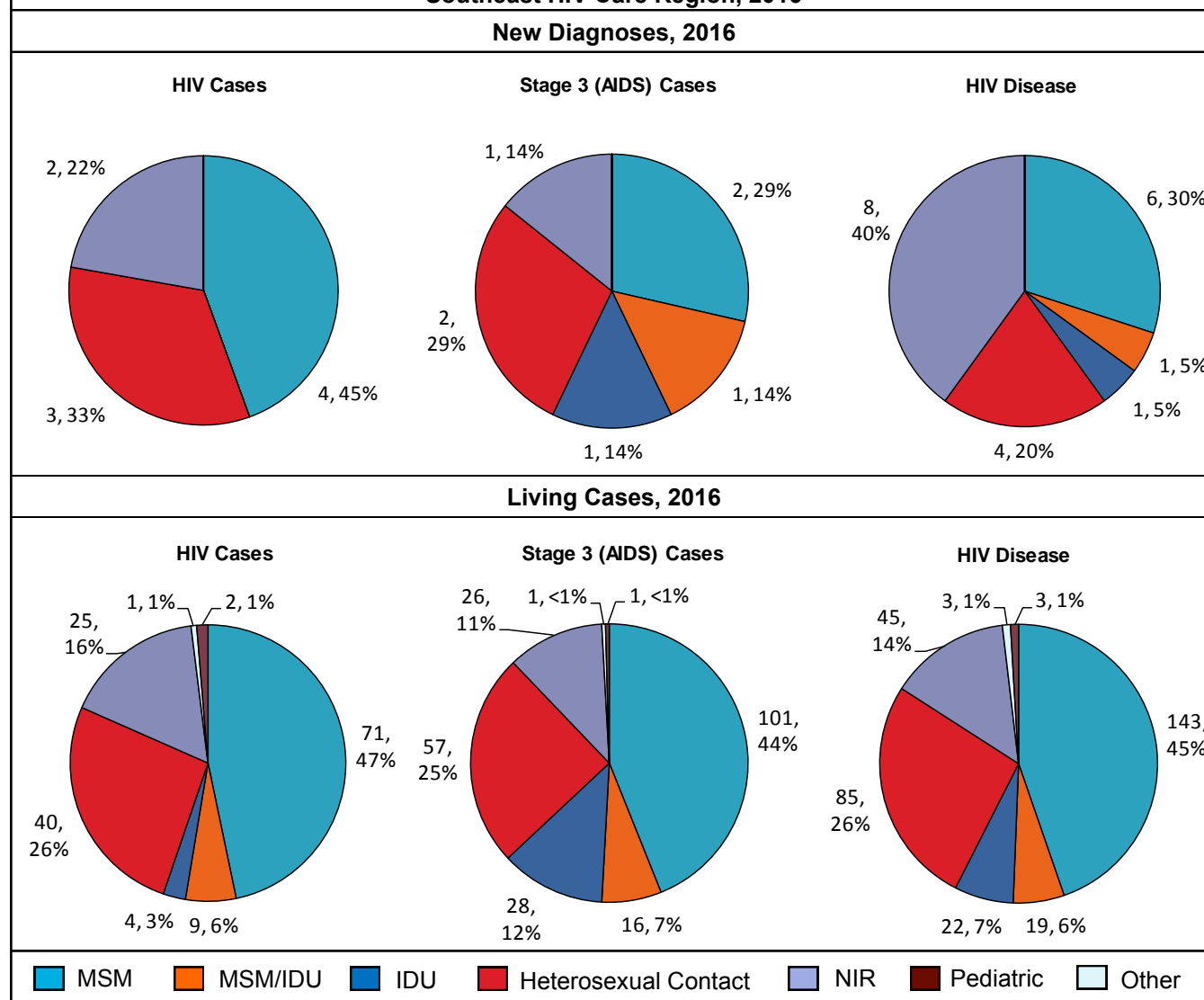
Note: Percentages may not total 100% due to rounding.

Epi Profiles Summary: Southeast HIV Care Region

Of the 382 persons living with HIV disease at the end of 2016, 72% were males (Table 1). The rate of those living with HIV disease among males was 2.6 times as high as the rate among females. Although whites represented the largest proportion of living HIV disease cases (61%), the rate of those living with HIV disease among blacks/African Americans was 8.3 times as high as the rate among whites. The rate was slightly higher among Hispanics compared to whites. However, the difference should be interpreted with caution because of the small number of Hispanics living with HIV disease. Among males, the rate of living cases was 6.7 times as high for blacks/African Americans compared to whites. Among females, the rate of those living with HIV disease was 12.8 times as high among blacks/African Americans compared to whites.

Of the 16 persons newly diagnosed with HIV disease in 2016, 44% were classified as stage 3 (AIDS) cases by the end of 2016 (Table 2). Males represented 63% of new diagnoses. Although whites represented the largest proportion of those newly diagnosed with HIV disease (50%), the rate of those newly diagnosed with HIV disease among blacks/African Americans was 8.7 times as high as the rate among whites.

Figure 6. Diagnosed and living HIV, stage 3 (AIDS), and HIV disease cases by exposure category, Southeast HIV Care Region, 2016



Among all categories of living cases in 2016, the largest proportion of cases with a known risk was attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and stage 3 (AIDS) cases and rates, by geographic area, Southeast HIV Care Region, 2016

Geographic Area	HIV Cases						Stage 3 (AIDS) Cases					
	Diagnosed 2016*			Living			Diagnosed 2016**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Cape Girardeau County	3	33.3%	3.8	29	19.1%	36.9	1	14.3%	1.3	30	13.0%	38.2
Scott County	2	22.2%	5.1	19	12.5%	48.7	0	0.0%	0.0	10	4.3%	25.6
St. Francois County	0	0.0%	0.0	19	12.5%	28.6	1	14.3%	1.5	54	23.5%	81.2
Pemiscot County	0	0.0%	0.0	12	7.9%	68.6	0	0.0%	0.0	10	4.3%	57.2
Dunklin County	1	11.1%	3.2	7	4.6%	22.7	3	42.9%	9.7	19	8.3%	61.5
Butler County	1	11.1%	2.3	17	11.2%	39.6	2	28.6%	4.7	21	9.1%	48.9
Remainder of Region	2	22.2%	0.9	49	32.2%	22.0	0	0.0%	0.0	86	37.4%	38.5
SOUTHEAST HIV CARE REGION TOTAL	9	100.0%	1.8	152	100.0%	30.5	7	100.0%	1.4	230	100.0%	46.1

*HIV cases diagnosed and reported to the Department during 2016 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

***Per 100,000 population based on 2015 DHSS estimates.

Note: Percentages may not total 100% due to rounding.

Although the number of living HIV cases was greatest in Cape Girardeau County, the rate of individuals living with HIV was greatest in Pemiscot County (Table 3). Among living stage 3 (AIDS) cases, both the number and rate of living cases were greatest in St. Francois County.

Table 4. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men, by selected race/ethnicity, Southeast HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	2	50.0%	46	64.8%	2	100.0%	69	68.3%
Black/African American	1	25.0%	21	29.6%	0	0.0%	29	28.7%
Hispanic	0	0.0%	2	2.8%	0	0.0%	1	1.0%
Other/Unknown	1	25.0%	2	2.8%	0	0.0%	2	2.0%
SOUTHEAST HIV CARE REGION TOTAL	4	100.0%	71	100.0%	2	100.0%	101	100.0%

*Remained HIV cases at the end of the year.
 **Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.
 Note: Percentages may not total 100% due to rounding.

Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity and current age group, Southeast HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	2	1.7%	5	10.0%	0	0.0%	7	4.1%
25-44	49	42.6%	27	54.0%	2	66.7%	81	47.1%
45-64	58	50.4%	18	36.0%	1	33.3%	78	45.3%
65+	6	5.2%	0	0.0%	0	0.0%	6	3.5%
SOUTHEAST HIV CARE REGION TOTAL	115	100.0%	50	100.0%	3	100.0%	172	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.
 **Percentage of cases per age group.
 Note: Percentages may not total 100% due to rounding.

Table 6. Living HIV disease cases in men who have sex with men, by geographic area, Southeast HIV Care Region, 2016

Geographic Area	Total	
	Cases	%
Cape Girardeau County	37	21.5%
Scott County	10	5.8%
St. Francois County	39	22.7%
Pemiscot County	7	4.1%
Dunklin County	6	3.5%
Butler County	17	9.9%
Remaining Counties	56	32.6%
SOUTHEAST HIV CARE REGION TOTAL	172	100.0%

Note: Percentages may not total 100% due to rounding.

Six new HIV disease diagnoses were attributed to MSM in 2016 for the Southeast HIV Care Region (Table 4). Of the six new HIV disease diagnoses, four (44%) were white. There were 172 living HIV disease cases attributed to MSM in the Southeast HIV Care Region. Whites represented the greatest proportion of persons living with HIV disease at the end of 2016.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 5). Among white MSM living with HIV disease, the greatest proportion of cases was between 45 and 64 years of age at the end of 2016. The greatest proportions of black/African American and Hispanic MSM living with HIV disease were between 25 and 44 years of age.

The largest numbers of living HIV disease cases attributed to MSM were residents of St. Francois County at the time of their most recent diagnosis (Table 6). The second largest numbers of living cases among MSM resided in Cape Girardeau County.

Table 7. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men and inject drugs, by selected race/ethnicity, Southeast HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	0	--	8	88.9%	1	100.0%	11	68.8%
Black/African American	0	--	1	11.1%	0	0.0%	5	31.3%
Hispanic	0	--	0	0.0%	0	0.0%	0	0.0%
Other/Unknown	0	--	0	0.0%	0	0.0%	0	0.0%
SOUTHEAST HIV CARE REGION TOTAL	0	--	9	100.0%	1	100.0%	16	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

Note: Percentages may not total 100% due to rounding.

Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity and current age group, Southeast HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	--	0	0.0%
19-24	0	0.0%	0	0.0%	0	--	0	0.0%
25-44	6	31.6%	2	33.3%	0	--	8	32.0%
45-64	12	63.2%	4	66.7%	0	--	16	64.0%
65+	1	5.3%	0	0.0%	0	--	1	4.0%
SOUTHEAST HIV CARE REGION TOTAL	19	100.0%	6	100.0%	0	--	25	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 9. Living HIV disease cases in men who have sex with men and inject drugs, Southeast HIV Care Region, 2016

Geographic Area	Cases	%
SOUTHEAST HIV CARE REGION TOTAL	25	100.0%

One new HIV disease diagnosis was attributed to MSM/IDU in 2016 for the Southeast HIV Care Region (Table 7). There were 25 MSM/IDU living with HIV disease at the end of 2016 whose most recent diagnosis occurred in the Southeast HIV Care Region. The largest proportions of both living HIV and stage 3 (AIDS) cases were white.

Among MSM/IDU living with HIV disease, the largest numbers of cases were among individuals 45 to 64 years of age at the end of 2016 (Table 8).

Table 10. Newly diagnosed and living HIV and stage 3 (AIDS) cases in injection drug users, by selected race/ethnicity and sex, Southeast HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	1	25.0%	1	100.0%	11	39.3%
Black/African American Male	0	--	0	0.0%	0	0.0%	8	28.6%
Hispanic Male	0	--	1	25.0%	0	0.0%	0	0.0%
White Female	0	--	1	25.0%	0	0.0%	4	14.3%
Black/African American Female	0	--	1	25.0%	0	0.0%	5	17.9%
Hispanic Female	0	--	0	0.0%	0	0.0%	0	0.0%
SOUTHEAST HIV CARE REGION TOTAL[†]	0	--	4	100.0%	1	100.0%	28	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

[†]Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 11. Living HIV disease cases in injection drug users, by selected race/ethnicity and current age group, Southeast HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	8.3%	0	0.0%	0	0.0%	0	0.0%	1	3.1%
25-44	1	8.3%	4	50.0%	2	40.0%	2	33.3%	10	31.3%
45-64	9	75.0%	4	50.0%	3	60.0%	4	66.7%	20	62.5%
65+	1	8.3%	0	0.0%	0	0.0%	0	0.0%	1	3.1%
SOUTHEAST HIV CARE REGION TOTAL	12	100.0%	8	100.0%	5	100.0%	6	100.0%	32	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 12. Living HIV disease cases in injection drug users, by geographic area, Southeast HIV Care Region, 2016

Geographic Area	Total	
	Cases	%
Butler County	2	6.3%
Cape Girardeau County	4	12.5%
Dunklin County	3	9.4%
Pemiscot County	1	3.1%
St. Francois County	10	31.3%
Remaining Counties	12	37.5%
SOUTHEAST HIV CARE REGION	32	100.0%

Note: Percentages may not total 100% due to rounding.

One new HIV disease diagnosis was attributed to IDU in 2016 for the Southeast HIV Care Region (Table 10). There were 32 living HIV disease cases attributed to IDU at the end of 2016 in the Southeast HIV Care Region. Of the IDU living with HIV disease, 88% were classified as stage 3 (AIDS) at the end of 2016. White males represented the largest proportion of living stage 3 (AIDS) cases.

Overall, the largest numbers of living HIV disease cases among IDU in the Southeast HIV Care Region were between 45 and 64 years of age at the end of 2016 (20) (Table 11).

St. Francois County had the largest number of living HIV disease cases attributed to IDU in 2016 (Table 12).

Table 13. Newly diagnosed and living HIV and stage 3 (AIDS) cases in heterosexual contacts, by selected race/ethnicity and sex, Southeast HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	5	12.5%	0	0.0%	9	15.8%
Black/African American Male	0	0.0%	4	10.0%	0	0.0%	10	17.5%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	0	0.0%
White Female	1	33.3%	20	50.0%	1	50.0%	17	29.8%
Black/African American Female	1	33.3%	9	22.5%	0	0.0%	20	35.1%
Hispanic Female	0	0.0%	1	2.5%	1	50.0%	1	1.8%
SOUTHEAST HIV CARE REGION TOTAL[†]	3	100.0%	40	100.0%	2	100.0%	57	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

[†]Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex and current age group, Southeast HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	1	3.4%	1	1.0%
19-24	0	0.0%	1	7.1%	1	2.7%	2	6.9%	5	5.2%
25-44	2	14.3%	5	35.7%	12	32.4%	16	55.2%	37	38.1%
45-64	9	64.3%	6	42.9%	21	56.8%	8	27.6%	44	45.4%
65+	3	21.4%	2	14.3%	3	8.1%	2	6.9%	10	10.3%
SOUTHEAST HIV CARE REGION TOTAL	14	100.0%	14	100.0%	37	100.0%	29	100.0%	97	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 15. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and geographic area, Southeast HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Butler County	9	64.3%	4	28.6%	0	0.0%	14	14.4%
Scott County	6	66.7%	3	33.3%	0	0.0%	9	9.3%
Cape Girardeau County	2	50.0%	2	50.0%	0	0.0%	4	4.1%
Dunklin County	3	37.5%	4	50.0%	1	12.5%	8	8.2%
St. Francois County	4	36.4%	7	63.6%	0	0.0%	11	11.3%
Pemiscot County	2	22.2%	7	77.8%	0	0.0%	9	9.3%
Remaining Counties	25	59.5%	16	38.1%	1	2.4%	42	43.3%
SOUTHEAST HIV CARE REGION TOTAL	51	52.6%	43	44.3%	2	2.1%	97	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race in each area.

***Percentage of cases per area.

Note: Percentages may not total 100% due to rounding.

Five new HIV disease diagnoses were attributed to heterosexual contact in 2016 for the Southeast HIV Care Region (Table 13). Black/African American females represented the largest proportion of living stage 3 (AIDS) cases, while white females represented the largest proportion of living HIV cases.

At the end of 2016, the largest proportions of heterosexual contact cases living with HIV disease were between 25 and 44 years of age for black/African American females (Table 14). Those 45 to 64 years of age represented the largest proportions among white males, white females, and black/African American males.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for heterosexual contact cases (Table 15). In both Pemiscot and St. Francois Counties, more than half of heterosexual contact cases were black/African American.

Figure 7. Reported P&S syphilis cases, by race and sex and age group at diagnosis, Southeast HIV Care Region, 2016

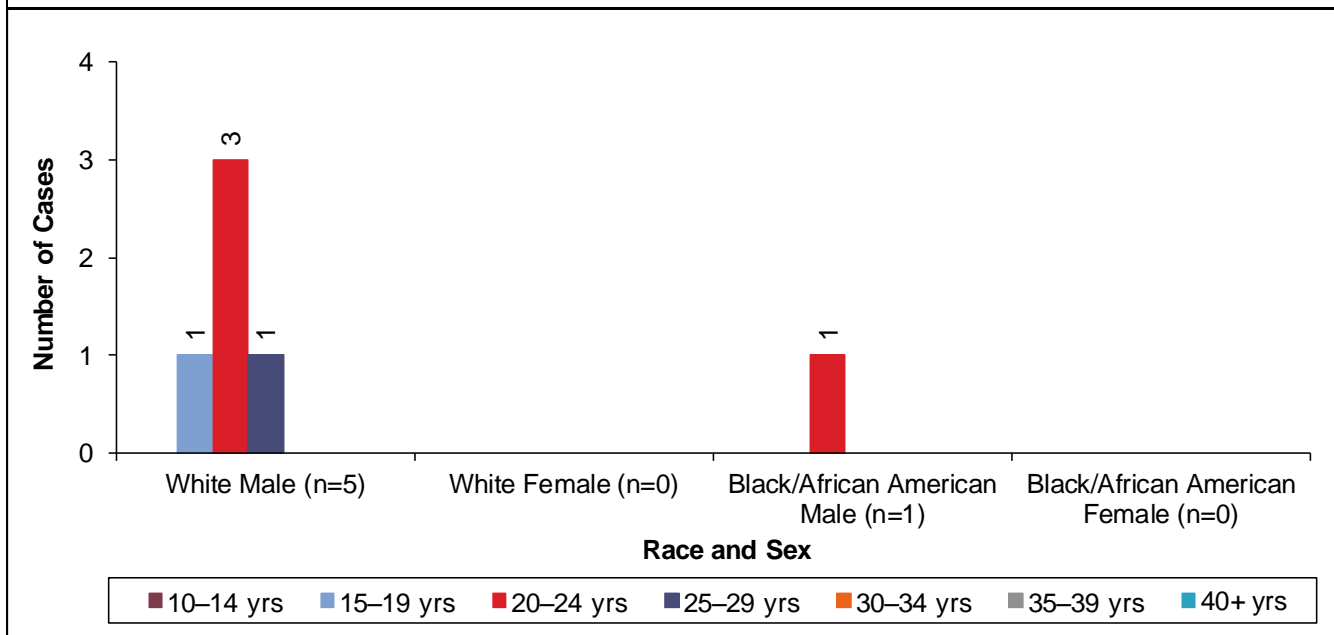
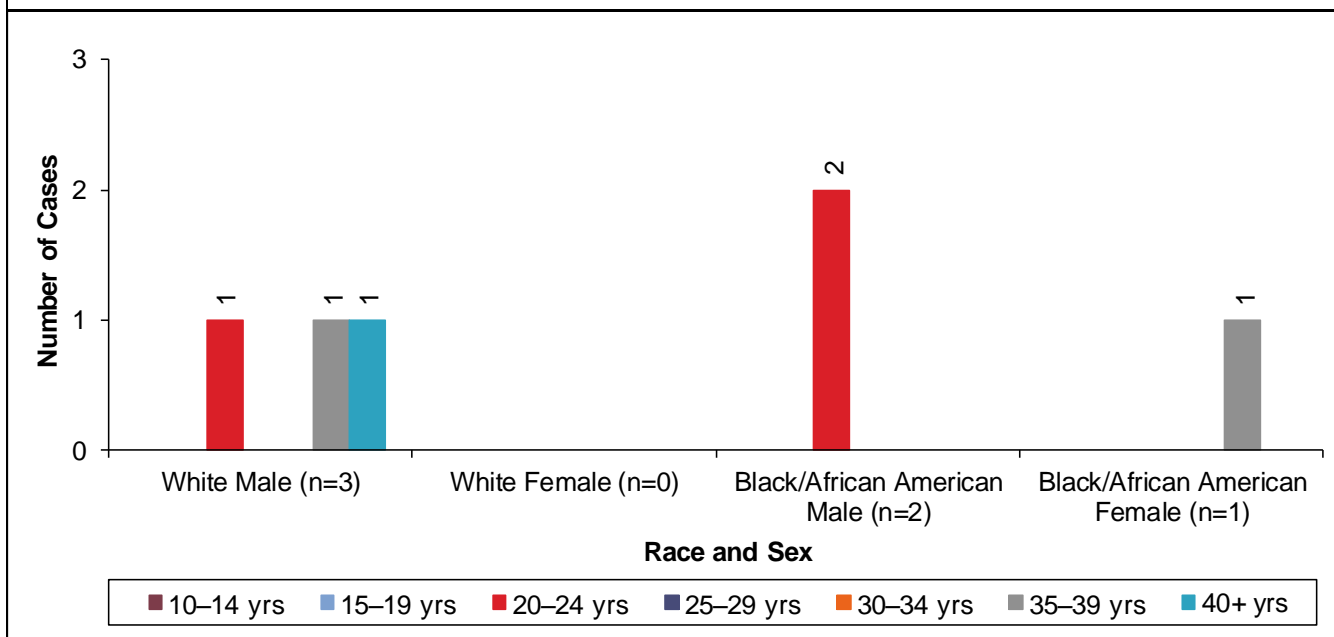
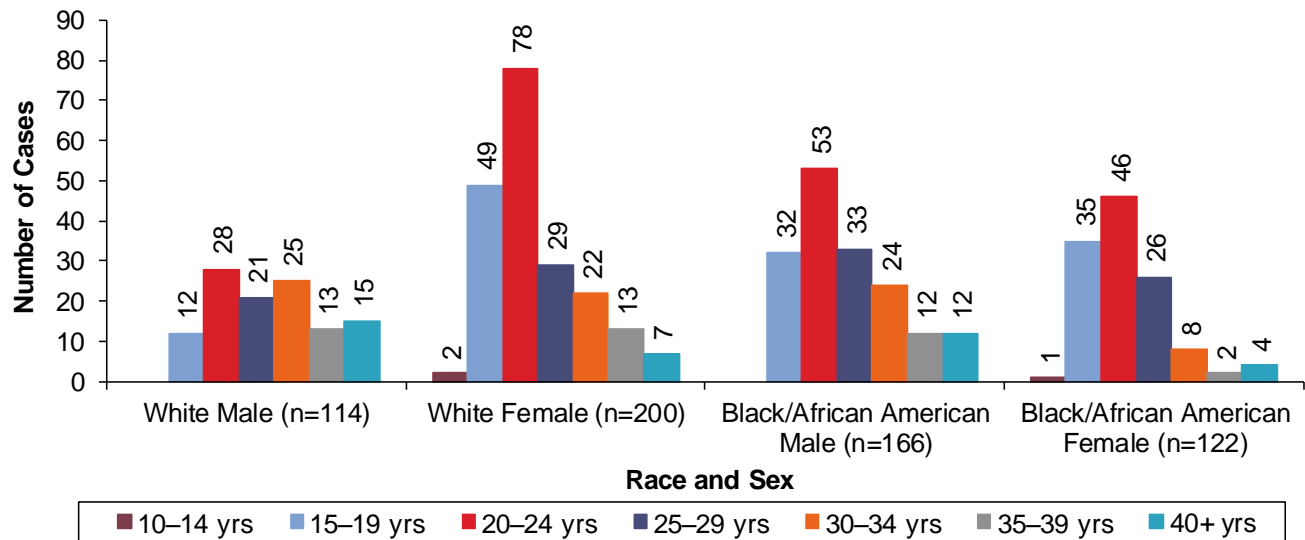


Figure 8. Reported early latent syphilis cases, by race and sex and age group at diagnosis, Southeast HIV Care Region, 2016

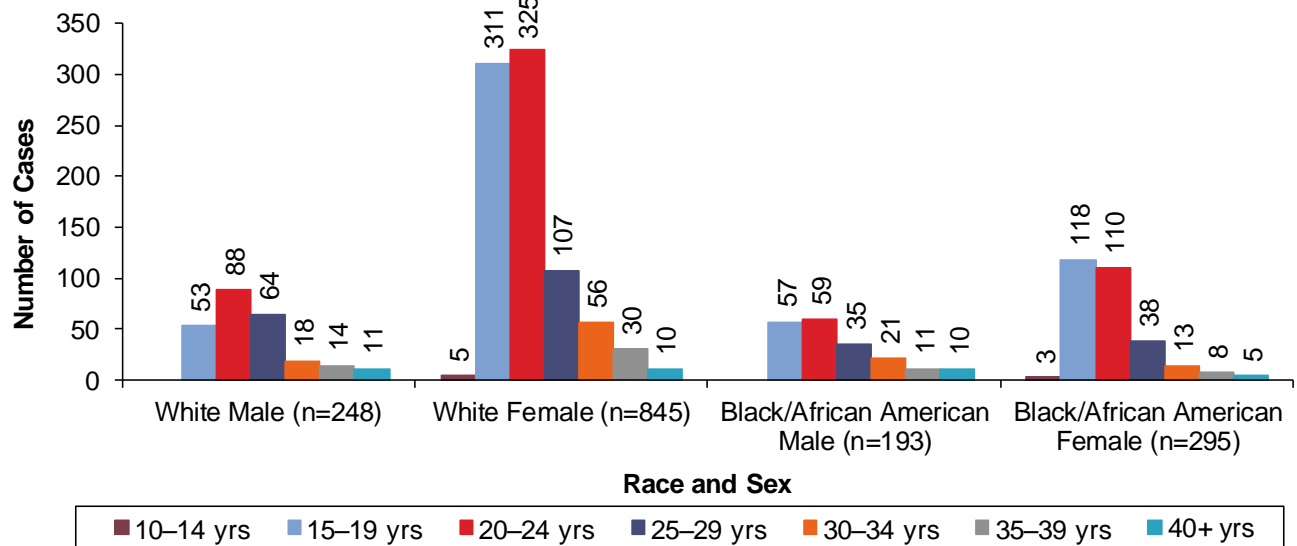


Six P&S syphilis cases were reported in the Southeast HIV Care Region in 2016 (Figure 7). The number of reported cases increased from 2015 to 2016 (2 to 6). There were no P&S syphilis cases reported among females.

Six early latent syphilis case were reported in the Southeast HIV Care Region in 2016, all but one of them among males (Figure 8). The number of reported cases increased from 2015 to 2016 (1 to 6).

Figure 9. Reported gonorrhea cases, by race and sex and age group at diagnosis, Southeast HIV Care Region, 2016

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

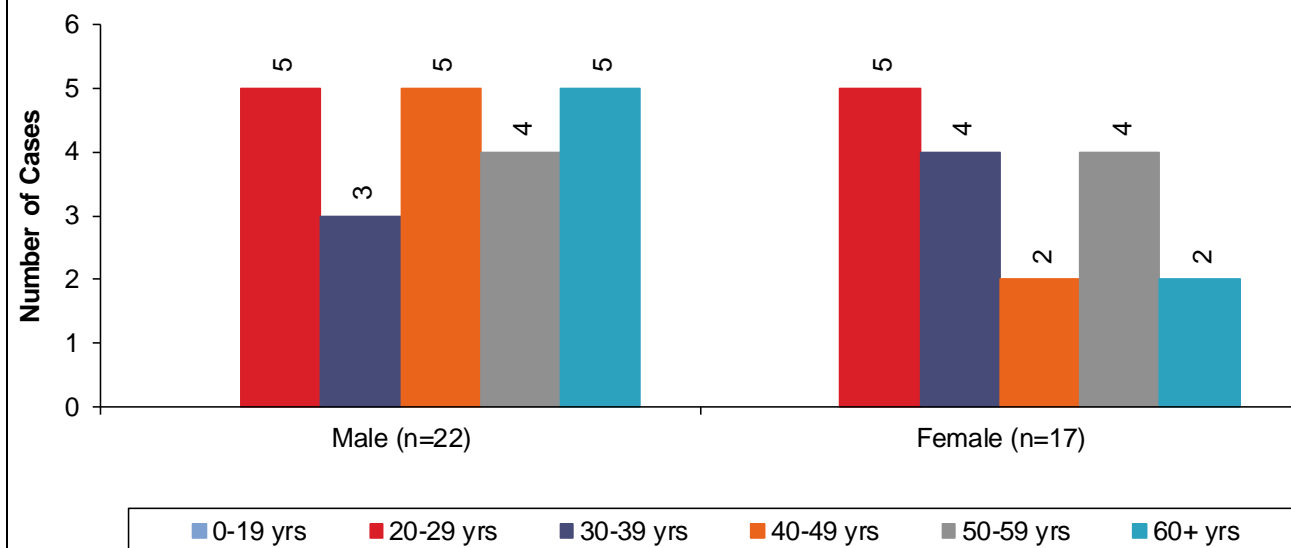
Figure 10. Reported chlamydia cases, by race and sex and age group at diagnosis, Southeast HIV Care Region, 2016

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest numbers of gonorrhea cases were reported among white females (200) and black/African American males (166) (Figure 9). The largest numbers of reported gonorrhea cases were diagnosed between 20 and 24 years of age for all race and sex categories presented.

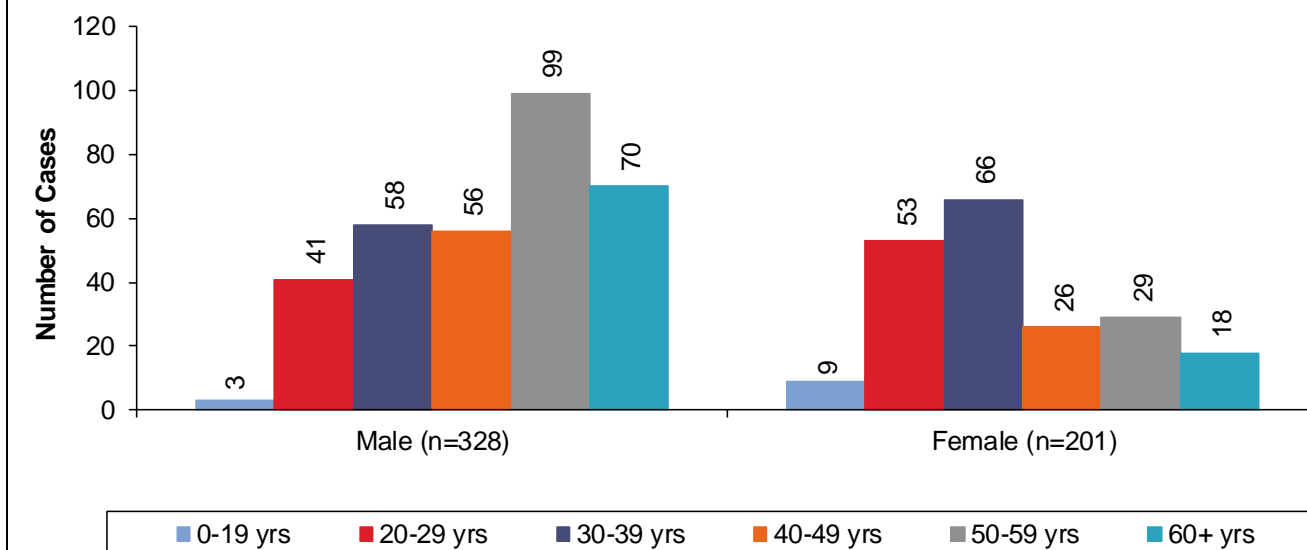
The largest numbers of chlamydia cases were reported among white females (845), followed by black/African American females (295) (Figure 10). The largest numbers of reported chlamydia cases were diagnosed between 20 and 24 years of age for white males, white females, and black/African American males. The largest proportion of chlamydia cases among black/African American females was persons 15 to 19 years of age.

Figure 11. Reported hepatitis B cases, by sex and age group at diagnosis, Southeast HIV Care Region, 2016



Note: Totals include persons whose age at diagnosis is unknown.

Figure 12. Reported hepatitis C cases, by sex and age group at diagnosis, Southeast HIV Care Region, 2016

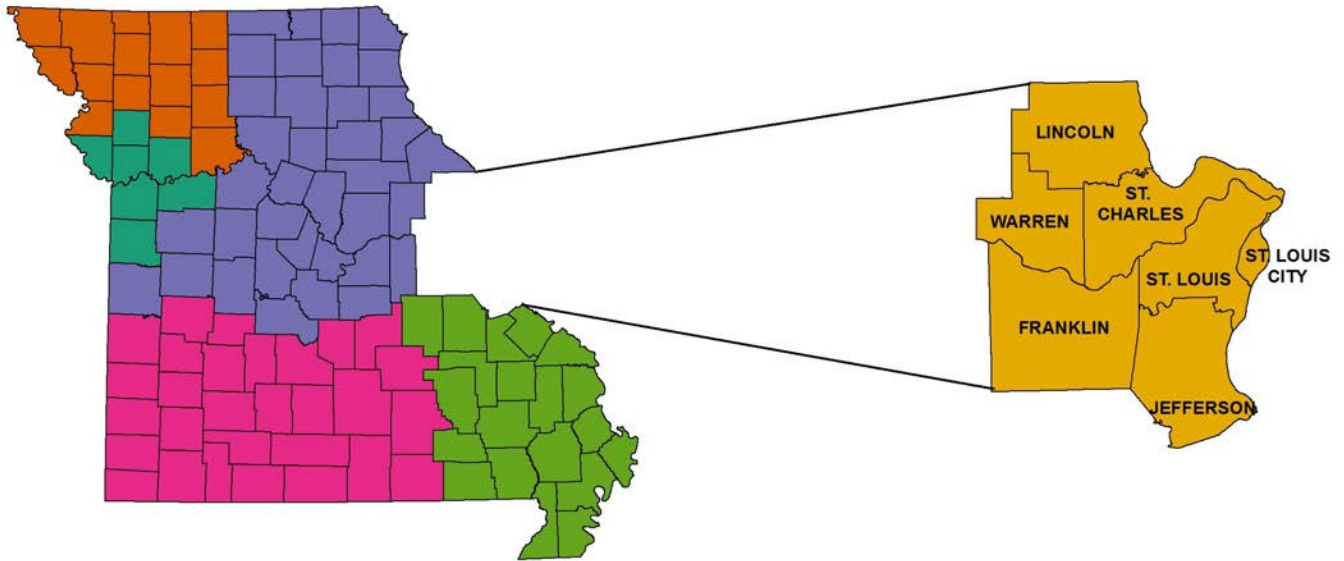


Note: Totals include persons whose age at diagnosis is unknown.

There were 39 reported cases of hepatitis B in the Southeast HIV Care Region during 2016 (Figure 11). Males represented 56% of reported hepatitis B cases. There were differences in the age distribution of reported hepatitis B cases by sex. Equal proportions of males were diagnosed among persons 20 to 29 years of age, 40 to 49 years of age, and 60 years of age and older. The greatest proportion of females was among persons 20 to 29 years of age.

In 2016, there were 529 hepatitis C cases reported in the Southeast HIV Care Region (Figure 12). Of those, 62% were male. There were differences in the age at diagnosis of reported hepatitis C cases by sex. Among males, persons 50 to 59 years of age represented the largest number of reported cases. Among females, the largest numbers of reported cases were among those 30 to 39 years of age.

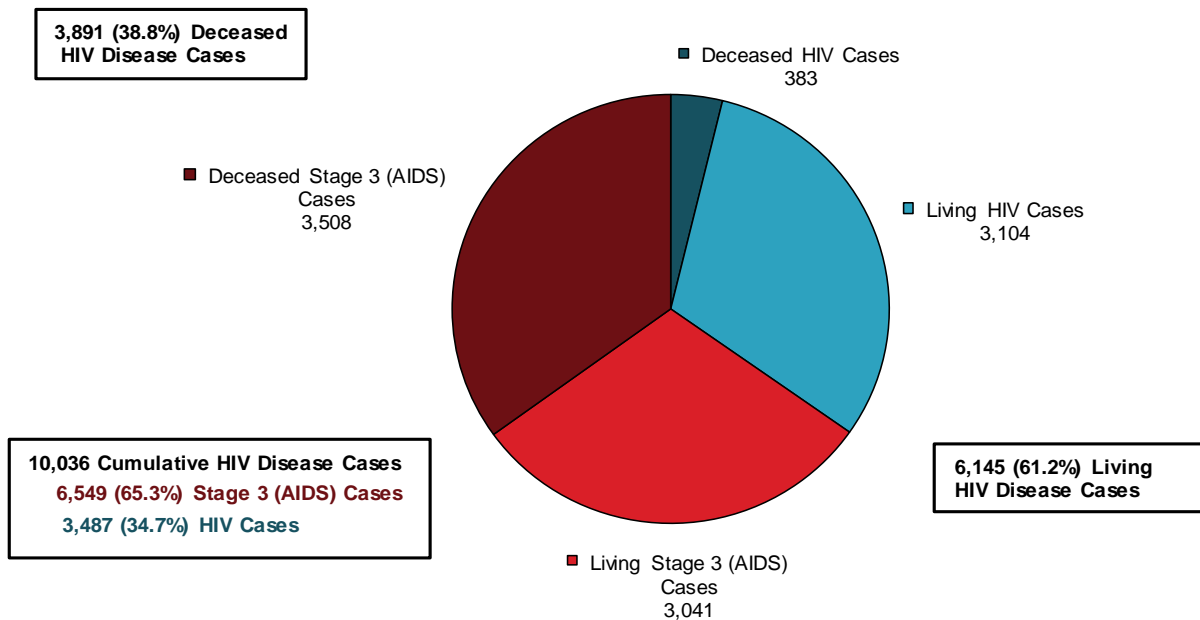
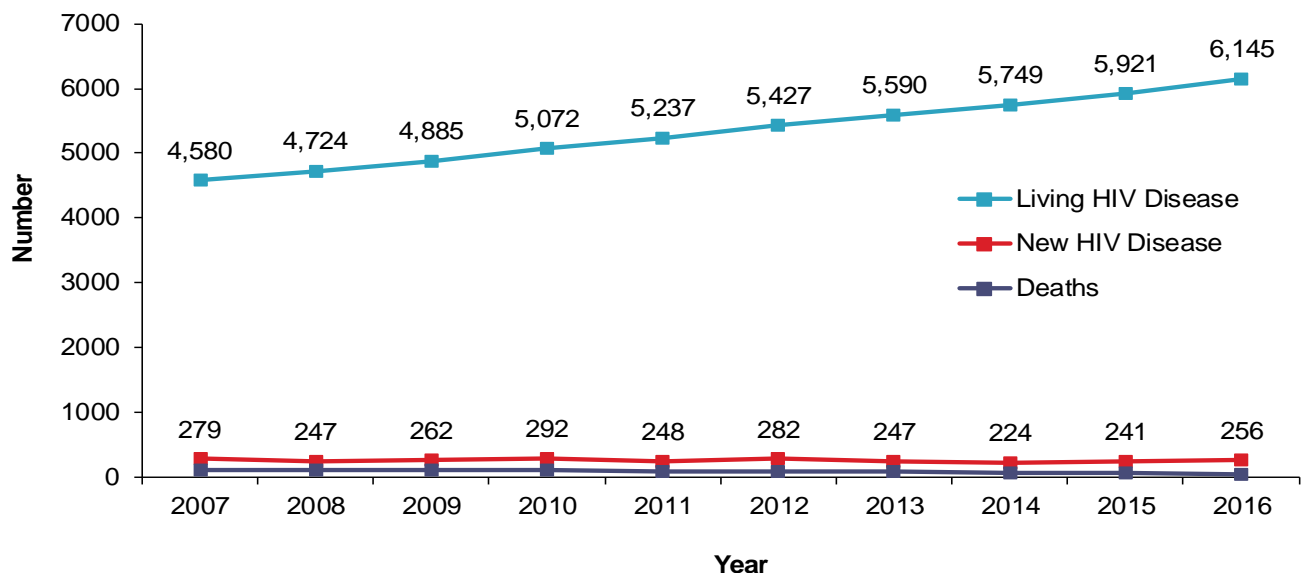
ST. LOUIS HIV CARE REGION



Population Counts, St. Louis HIV Care Region, 2015

County	White		Black/African American		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races/Other Race		Total
Franklin County	97,407	95.1%	1,128	1.1%	1,795	1.8%	545	0.5%	299	0.3%	1,252	1.2%	102,426
Jefferson County	212,106	94.6%	2,539	1.1%	4,188	1.9%	1,622	0.7%	611	0.3%	3,058	1.4%	224,124
Lincoln County	50,924	93.1%	1,098	2.0%	1,278	2.3%	351	0.6%	168	0.3%	877	1.6%	54,696
St. Charles County	337,753	87.6%	17,948	4.7%	12,424	3.2%	9,921	2.6%	685	0.2%	6,859	1.8%	385,590
St. Louis County	637,146	65.9%	239,342	24.7%	28,140	2.9%	41,944	4.3%	1,825	0.2%	18,965	2.0%	967,362
St. Louis City	138,982	44.0%	146,673	46.5%	12,261	3.9%	10,210	3.2%	658	0.2%	6,901	2.2%	315,685
Warren County	30,732	91.7%	773	2.3%	1,106	3.3%	186	0.6%	123	0.4%	593	1.8%	33,513
Region Total	1,541,050	72.7%	409,501	19.3%	61,192	2.9%	64,779	3.1%	4,369	0.2%	38,505	1.8%	2,119,396

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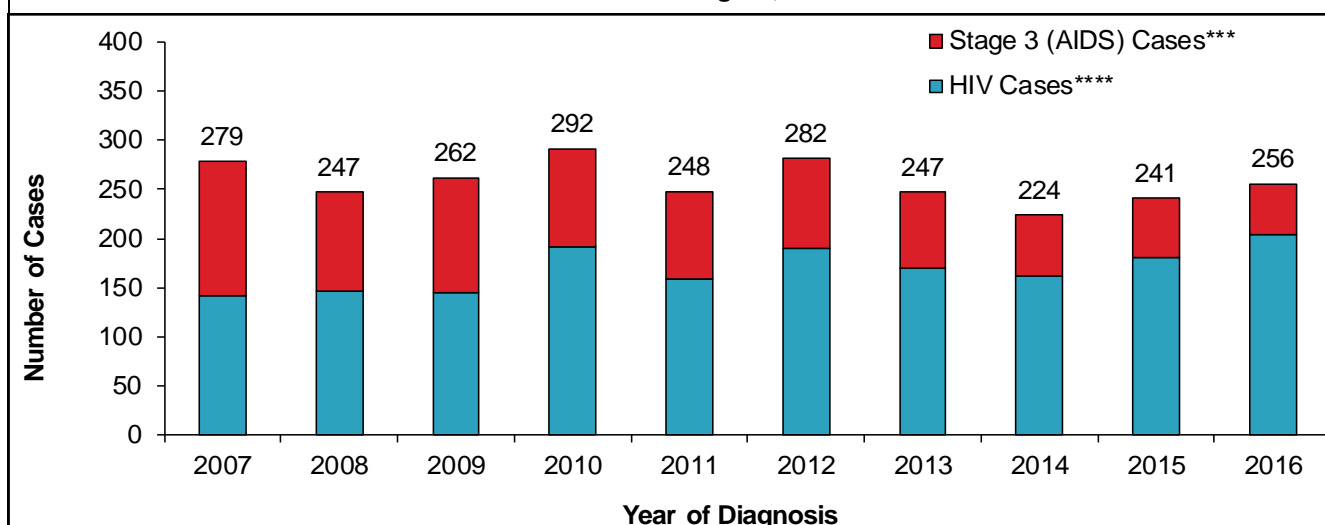
Figure 1. HIV disease cases (living and deceased), by current HIV vs. stage 3 (AIDS) status, St. Louis HIV Care Region, 1982-2016**Figure 2. Living and new HIV disease cases and deaths, by year*, St. Louis HIV Care Region, 2007-2016**

*Living HIV disease cases represent the number of individuals living with HIV disease at the end of the year. New HIV disease cases represent the number of individuals newly diagnosed in the year. HIV disease deaths represent the number of individuals that died in the year.

From 1982 to 2016, a total of 10,036 HIV disease cases were diagnosed in the St. Louis HIV Care Region and reported to DHSS (Figure 1). Of the cumulative cases reported, 61% were still presumed to be living with HIV disease at the end of 2016. Among those living with HIV disease, 3,104 were classified as HIV cases at the end of 2016 and 3,041 were classified as stage 3 (AIDS) cases.

At the end of 2016, there were 6,145 persons living with HIV disease whose most recent diagnosis occurred in the St. Louis HIV Care Region (Figure 2). The number of people living with HIV disease increased every year. There were 256 new HIV disease diagnoses in 2016. The number of new diagnoses fluctuated slightly from 2007 to 2016. The number of deaths among persons with HIV disease remained generally steady.

Figure 3. HIV disease cases, by current status* and year of diagnosis,
St. Louis HIV Care Region, 2007-2016**



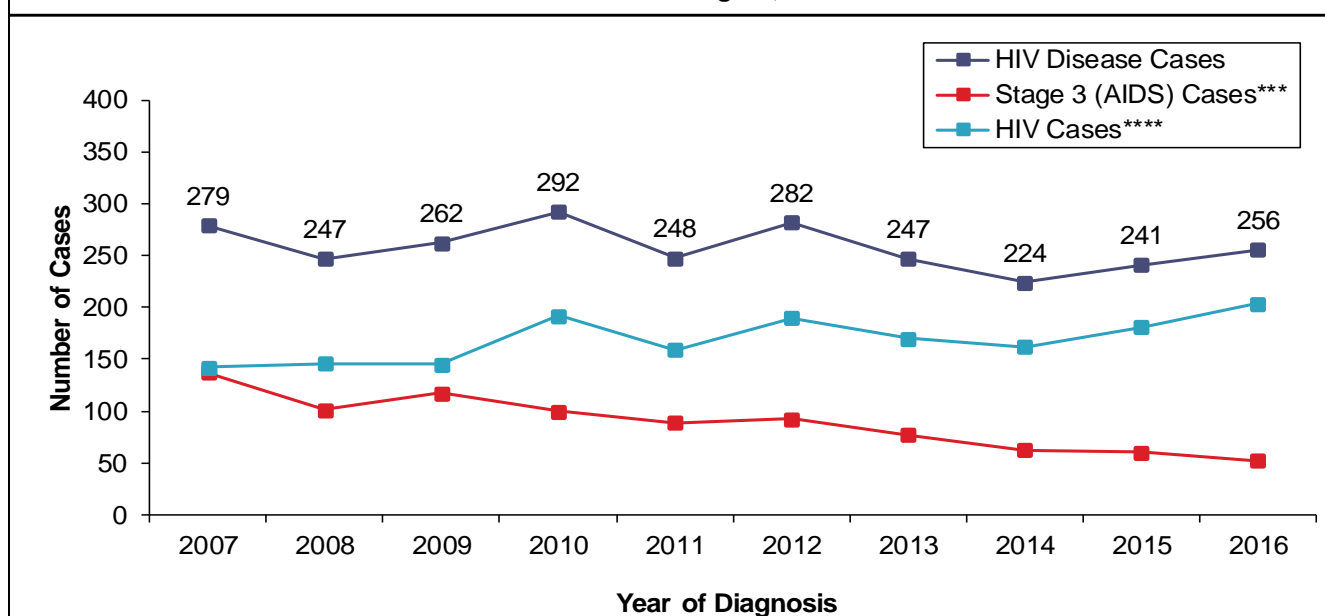
*HIV case vs. stage 3 (AIDS) case.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis,
St. Louis HIV Care Region, 2007-2016**



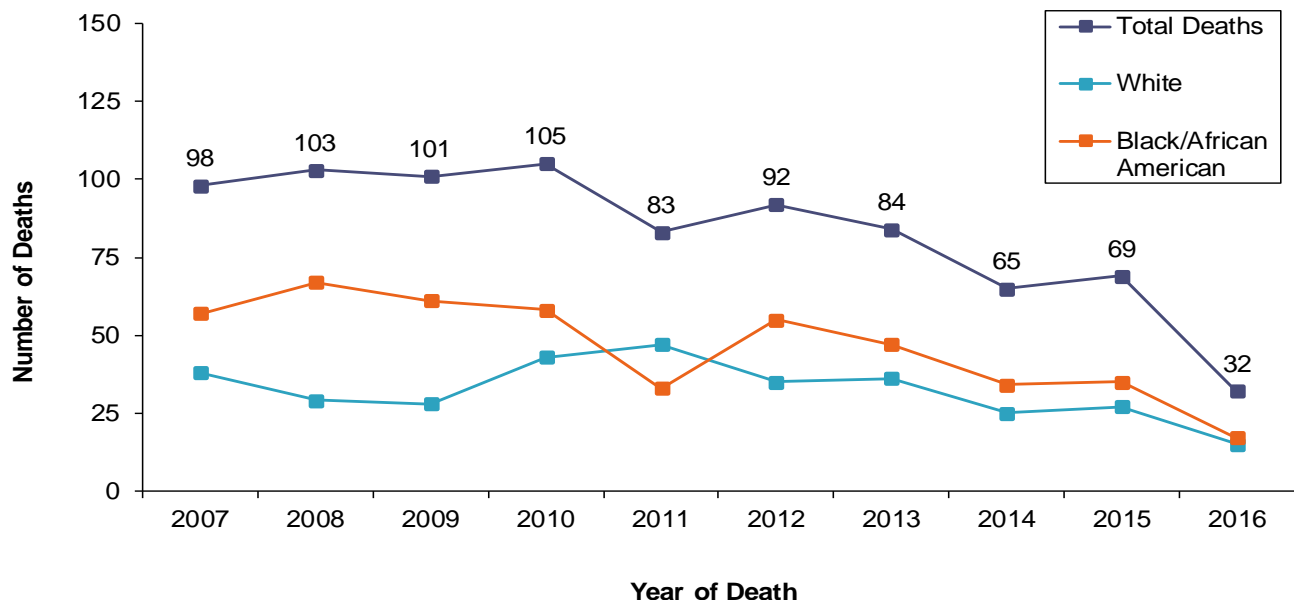
*HIV case vs. stage 3 (AIDS) case.

**Cases are indicated by year of initial diagnosis reported to DHSS, (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

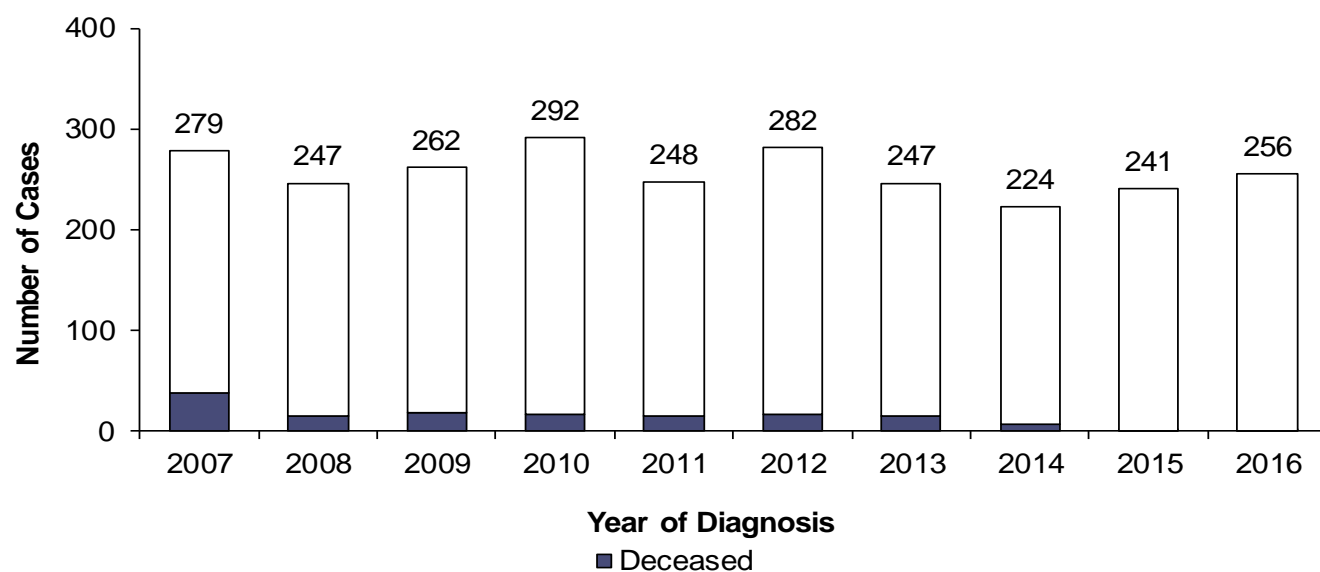
****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

The number of new diagnoses remained fairly stable from 2007 to 2016. The number of new diagnoses in 2016 increased 6% from 2015. Differences in the number of persons sub-classified as stage 3 (AIDS) cases each year are due to the progression of the disease over time.

Figure 5. HIV disease deaths*, by selected race and year of death, St. Louis HIV Care Region, 2007-2016†

*Includes deaths that have occurred among those diagnosed with HIV disease in the St. Louis HIV Care Region.

†Only includes deaths through December 31, 2016 and reported by February 28, 2017.

Figure 6. Persons diagnosed with HIV disease, by current vital status* and year of diagnosis, St. Louis HIV Care Region, 2007-2016**

*Vital status on December 31, 2016.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

The number of deaths among persons with HIV disease remained generally stable between 2007 and 2010, decreased from 2010 to 2011, and then remained generally stable between 2011 and 2013 (Figure 5). The lower numbers of deaths in more recent years were likely due to delays in death reporting.

Of the 279 persons diagnosed with HIV disease in 2007, 38 (14%) were deceased by the end of 2016 (Figure 6). Among the 256 individuals first diagnosed in 2016, one (less than 1%) was deceased at the end of 2016. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease.

Table 1. Living[†] HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, St. Louis HIV Care Region, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	2,534	81.6%	247.4	2,517	82.8%	245.8	5,051	82.2%	493.2
Female	570	18.4%	52.0	524	17.2%	47.8	1,094	17.8%	99.9
Total	3,104	100.0%	146.5	3,041	100.0%	143.5	6,145	100.0%	289.9
Race/Ethnicity									
White	1,237	39.9%	80.3	1,190	39.1%	77.2	2,427	39.5%	157.5
Black/African American	1,716	55.3%	419.0	1,718	56.5%	419.5	3,434	55.9%	838.6
Hispanic	91	2.9%	148.7	78	2.6%	127.5	169	2.8%	276.2
Asian/Pacific Islander	22	0.7%	34.0	13	0.4%	20.1	35	0.6%	54.0
American Indian/Alaskan Native	1	0.0%	22.9	0	0.0%	0.0	1	0.0%	22.9
Two or More Races/Unknown	37	1.2%	--	42	1.4%	--	79	1.3%	--
Total	3,104	100.0%	146.5	3,041	100.0%	143.5	6,145	100.0%	289.9
Race/Ethnicity-Males									
White Male	1,116	44.0%	148.0	1,090	43.3%	144.6	2,206	43.7%	292.6
Black/African American Male	1,302	51.4%	699.0	1,319	52.4%	708.1	2,621	51.9%	1407.2
Hispanic Male	70	2.8%	222.9	65	2.6%	207.0	135	2.7%	429.8
Asian/Pacific Islander Male	16	0.6%	51.2	9	0.4%	28.8	25	0.5%	80.0
American Indian/Alaskan Native Male	1	0.0%	46.2	0	0.0%	0.0	1	0.0%	46.2
Two or More Races/Unknown Male	29	1.1%	--	34	1.4%	--	63	1.2%	--
Total	2,534	100.0%	247.4	2,517	100.0%	245.8	5,051	100.0%	493.2
Race/Ethnicity-Females									
White Female	121	21.2%	15.4	100	19.1%	12.7	221	20.2%	28.1
Black/African American Female	414	72.6%	185.5	399	76.1%	178.7	813	74.3%	364.2
Hispanic Female	21	3.7%	70.5	13	2.5%	43.6	34	3.1%	114.2
Asian/Pacific Islander Female	6	1.1%	17.9	4	0.8%	11.9	10	0.9%	29.8
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	8	1.4%	--	8	1.5%	--	16	1.5%	--
Total	570	100.0%	52.0	524	100.0%	47.8	1,094	100.0%	99.9
Current Age[‡]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	15	0.5%	5.2	1	0.0%	0.3	16	0.3%	5.5
13-18	29	0.9%	17.7	6	0.2%	3.7	35	0.6%	21.3
19-24	226	7.3%	140.2	56	1.8%	34.7	282	4.6%	175.0
25-44	1,430	46.1%	258.6	867	28.5%	156.8	2,297	37.4%	415.3
45-64	1,247	40.2%	214.4	1,878	61.8%	323.0	3,125	50.9%	537.4
65+	157	5.1%	49.3	233	7.7%	73.2	390	6.3%	122.6
Total	3,104	100.0%	146.5	3,041	100.0%	143.5	6,145	100.0%	289.9

[†]Includes persons diagnosed with HIV disease in the St. Louis HIV Care Region who are currently living, regardless of current residence.

*Cases which remained HIV cases at the end of 2016.

**Cases classified as stage 3 (AIDS) by December 31, 2016.

***The sum of HIV cases and stage 3 (AIDS) cases.

****Per 100,000 population based on 2015 DHSS estimates.

[‡]Based on age as of December 31, 2016.

Note: Percentages may not total 100% due to rounding.

Table 2. Diagnosed HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, St. Louis HIV Care Region, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	170	83.3%	16.6	40	76.9%	3.9	210	82.0%	20.5
Female	34	16.7%	3.1	12	23.1%	1.1	46	18.0%	4.2
Total	204	100.0%	9.6	52	100.0%	2.5	256	100.0%	12.1
Race/Ethnicity									
White	57	27.9%	3.7	16	30.8%	1.0	73	28.5%	4.7
Black/African American	133	65.2%	32.5	35	67.3%	8.5	168	65.6%	41.0
Hispanic	6	2.9%	9.8	0	0.0%	0.0	6	2.3%	9.8
Asian/Pacific Islander	2	1.0%	3.1	0	0.0%	0.0	2	0.8%	3.1
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	6	2.9%	--	1	1.9%	--	7	2.7%	--
Total	204	100.0%	9.6	52	100.0%	2.5	256	100.0%	12.1
Race/Ethnicity-Males									
White Male	48	28.2%	6.4	14	35.0%	1.9	62	29.5%	8.2
Black/African American Male	111	65.3%	59.6	25	62.5%	13.4	136	64.8%	73.0
Hispanic Male	4	2.4%	12.7	0	0.0%	0.0	4	1.9%	12.7
Asian/Pacific Islander Male	2	1.2%	6.4	0	0.0%	0.0	2	1.0%	6.4
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	5	2.9%	26.2	1	2.5%	--	6	2.9%	--
Total	170	100.0%	16.6	40	100.0%	3.9	210	100.0%	20.5
Race/Ethnicity-Females									
White Female	9	26.5%	1.1	2	16.7%	0.3	11	23.9%	1.4
Black/African American Female	22	64.7%	9.9	10	83.3%	4.5	32	69.6%	14.3
Hispanic Female	2	5.9%	6.7	0	0.0%	0.0	2	4.3%	6.7
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	1	2.9%	--	0	0.0%	--	1	2.2%	--
Total	34	100.0%	3.1	12	100.0%	1.1	46	100.0%	4.2
Current Age[†]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	4	2.0%	1.4	0	0.0%	0.0	4	1.6%	1.4
13-18	8	3.9%	4.9	3	5.8%	1.8	11	4.3%	6.7
19-24	63	30.9%	39.1	8	15.4%	5.0	71	27.7%	44.1
25-44	88	43.1%	15.9	18	34.6%	3.3	106	41.4%	19.2
45-64	40	19.6%	6.9	22	42.3%	3.8	62	24.2%	10.7
65+	1	0.5%	0.3	1	1.9%	0.3	2	0.8%	0.6
Total	204	100.0%	9.6	52	100.0%	2.5	256	100.0%	12.1

*HIV cases diagnosed during 2016 which remained HIV cases at the end of the year.

**Stage 3 (AIDS) cases initially diagnosed in 2016.

***The sum of newly diagnosed HIV cases and newly diagnosed stage 3 (AIDS) cases. Does not include cases diagnosed prior to 2016 with HIV, which progressed to stage 3 (AIDS) in 2016.

****Per 100,000 population based on 2015 DHSS estimates.

†Based on age as of December 31, 2016.

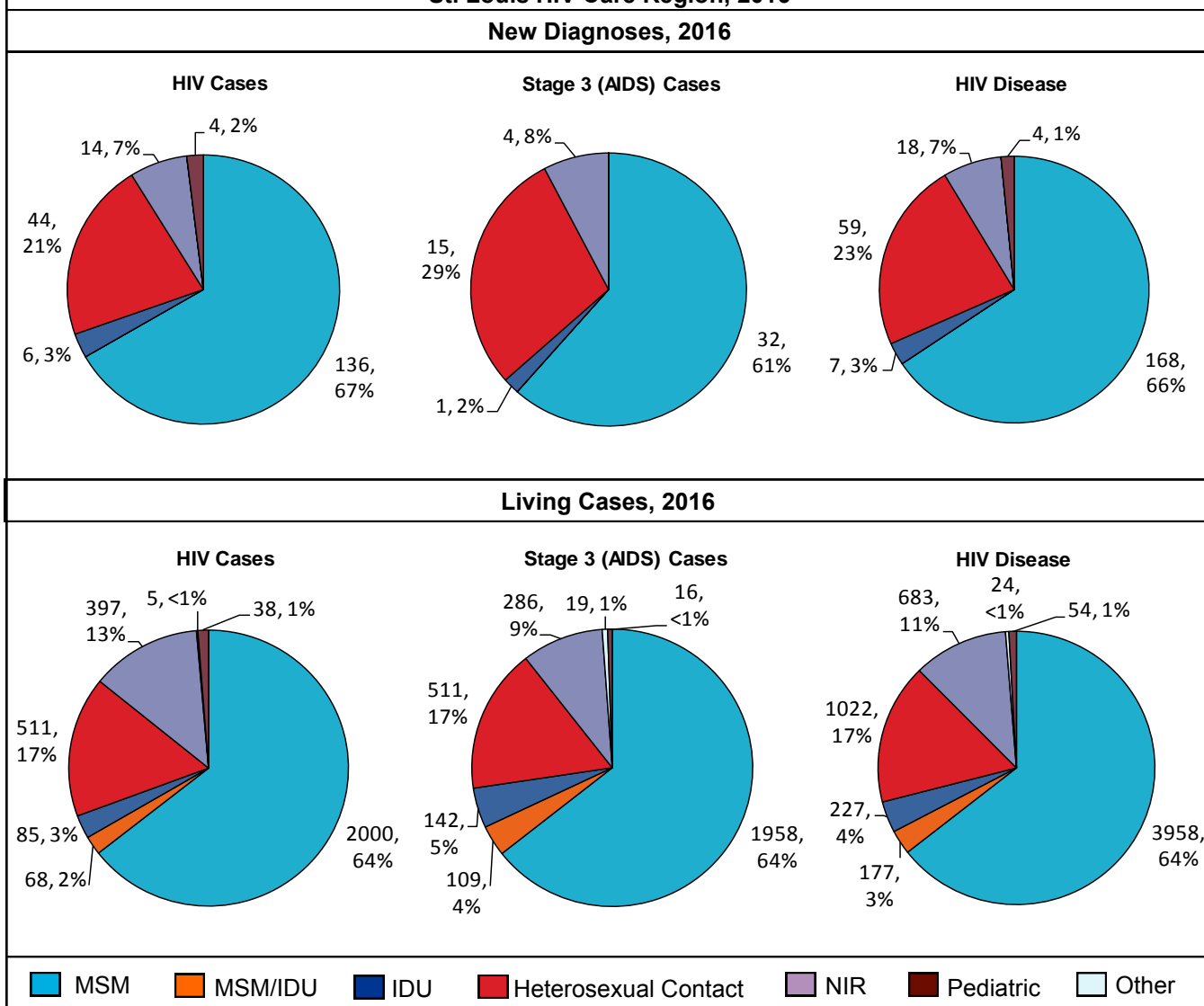
Note: Percentages may not total 100% due to rounding.

Epi Profiles Summary: St. Louis HIV Care Region

Of the 6,145 persons living with HIV disease at the end of 2016, 82% were males (Table 1). The rate of those living with HIV disease was 4.9 times as high among males compared to females. In contrast to the rest of the HIV Care Regions in which whites comprised the majority of persons living with HIV disease, blacks/African Americans represented the largest proportion in the St. Louis HIV Care Region. The rate of persons living with HIV disease among blacks/African Americans was 5.3 times as high as the rate among whites. The rate among Hispanics was 1.8 times as high as the rate among whites. Among males, the rate of individuals living with HIV disease for blacks/African American was 4.8 times as high compared to whites, and 1.5 times as high among Hispanics compared to whites. Among females, the rate of those living with HIV disease among blacks/African Americans was 13 times as high as the rate among whites, and 4.1 times as high among Hispanics compared to whites.

Of the 256 persons newly diagnosed with HIV disease in 2016, 20% were classified as stage 3 (AIDS) cases by the end of 2016 (Table 2). The rate of new HIV disease diagnoses was 4.9 times as high among males compared to females. The rate of new HIV disease cases was 8.7 times as high among blacks/African Americans compared to whites, and 2.1 times as high among Hispanics compared to whites.

Figure 7. Diagnosed and living HIV, stage 3 (AIDS), and HIV disease cases by exposure category, St. Louis HIV Care Region, 2016



Among all categories, the largest proportion of cases with a known risk was attributed to MSM (Figure 7). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and stage 3 (AIDS) cases and rates, by geographic area, St. Louis HIV Care Region, 2016

Geographic Area	HIV Cases						Stage 3 (AIDS) Cases					
	Diagnosed 2016*			Living			Diagnosed 2016**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
St. Louis City	105	51.5%	33.3	1,680	54.1%	532.2	16	30.8%	5.1	1,730	56.9%	548.0
St. Louis County	78	38.2%	7.8	1,164	37.5%	116.0	30	57.7%	3.0	1,092	35.9%	108.8
St. Charles County	13	6.4%	3.4	141	4.5%	36.6	3	5.8%	0.8	113	3.7%	29.3
Remainder of Region	8	3.9%	1.9	119	3.8%	28.7	3	5.8%	0.7	106	3.5%	25.6
ST. LOUIS HIV CARE REGION TOTAL	204	100.0%	9.6	3,104	100.0%	146.5	52	100.0%	2.5	3,041	100.0%	143.5

*HIV cases diagnosed and reported to DHSS during 2016 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

***Per 100,000 population based on 2015 DHSS estimates.

Note: Percentages may not total 100% due to rounding.

Table 4. Diagnosed HIV cases and rates, by selected race/ethnicity and geographic area, St. Louis HIV Care Region, 2016

Area	White			Black/African American			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
St. Louis City	24	22.9%	17.3	75	71.4%	51.1	3	2.9%	24.5	105	100.0%	33.3
St. Louis County	18	23.1%	2.7	54	69.2%	22.6	3	3.8%	10.7	78	100.0%	7.8
St. Charles County	9	69.2%	2.7	3	23.1%	16.7	0	0.0%	0.0	13	100.0%	3.4
Remainder of Region	6	75.0%	1.5	1	12.5%	18.1	0	0.0%	0.0	8	100.0%	1.9
ST. LOUIS HIV CARE REGION TOTAL	57	27.9%	3.7	133	65.2%	32.5	6	0.0%	9.8	204	100.0%	9.6

*Per 100,000 population based on 2015 DHSS estimates.

**Includes cases in persons whose race/ethnicity is either unknown or not listed.

Note: Row percentages are shown. Percentages may not total 100% due to rounding.

Table 5. Diagnosed stage 3 (AIDS) cases and rates, by selected race/ethnicity and geographic area, St. Louis HIV Care Region, 2016

Area	White			Black/African American			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
St. Louis City	3	18.8%	2.2	13	81.3%	8.9	0	0.0%	0.0	16	100.0%	5.0
St. Louis County	8	26.7%	1.2	21	70.0%	8.8	0	0.0%	0.0	30	100.0%	3.0
St. Charles County	2	66.7%	0.6	1	33.3%	5.6	0	0.0%	0.0	3	100.0%	0.8
Remainder of Region	3	100.0%	0.8	0	0.0%	0.0	0	0.0%	0.0	3	100.0%	0.7
ST. LOUIS HIV CARE REGION TOTAL	16	30.8%	1.0	35	67.3%	8.5	0	0.0%	0.0	52	100.0%	2.5

*Per 100,000 population based on 2015 DHSS estimates.

**Includes cases in persons whose race/ethnicity is either unknown or not listed.

Note: Row percentages are shown. Percentages may not total 100% due to rounding.

The rates of new diagnoses and living cases were higher in St. Louis City compared to other areas in the St. Louis HIV Care Region (Table 3).

There were differences in the proportion of new HIV cases diagnosed by race/ethnicity among the geographic areas (Table 4). Greater proportions of new HIV cases diagnosed in St. Louis City and St. Louis County were among blacks/African Americans compared to St. Charles County and the remainder of the St. Louis HIV Care Region.

There were also differences in the proportion of new stage 3 (AIDS) cases diagnosed by race/ethnicity among the geographic areas (Table 5). Overall, a greater percentage of blacks/African Americans were diagnosed in St. Louis City and St. Louis County compared to the remainder of the St. Louis HIV Care Region, where whites represented a greater percentage of diagnoses.

Table 6. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men, by selected race/ethnicity, St. Louis HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	41	30.1%	942	47.1%	11	34.4%	917	46.8%
Black/African American	85	62.5%	962	48.1%	20	62.5%	958	48.9%
Hispanic	4	2.9%	57	2.9%	0	0.0%	48	2.5%
Other/Unknown	6	4.4%	39	2.0%	1	3.1%	35	1.8%
ST. LOUIS HIV CARE REGION TOTAL	136	100.0%	2,000	100.0%	32	100.0%	1,958	100.0%

*Remained HIV cases at the end of the year.
 **Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.
 Note: Percentages may not total 100% due to rounding.

Table 7. Living HIV disease cases in men who have sex with men, by selected race/ethnicity and current age group, St. Louis HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	1	0.1%	11	0.6%	0	0.0%	12	0.3%
19-24	19	1.0%	177	9.2%	4	3.8%	210	5.3%
25-44	495	26.6%	892	46.5%	45	42.9%	1,468	37.1%
45-64	1,155	62.1%	785	40.9%	53	50.5%	2,020	51.0%
65+	189	10.2%	55	2.9%	3	2.9%	248	6.3%
ST. LOUIS HIV CARE REGION TOTAL	1,859	100.0%	1,920	100.0%	105	100.0%	3,958	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.
 **Percentage of cases per age group.
 Note: Percentages may not total 100% due to rounding.

Table 8. Living HIV disease cases in men who have sex with men, by selected race/ethnicity and geographic area, St. Louis HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	1,045	46.8%	1,098	49.2%	44	2.0%	2,232	56.4%
St. Louis County	572	39.8%	784	54.6%	57	4.0%	1,436	36.3%
St. Charles County	131	77.1%	30	17.6%	3	1.8%	170	4.3%
Remaining Counties	111	92.5%	8	6.7%	1	0.8%	120	3.0%
ST. LOUIS HIV CARE REGION TOTAL	1,859	47.0%	1,920	48.5%	105	2.7%	3,958	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.
 **Percentage of race/ethnicity in each area.
 ***Percentage of cases per area.
 Note: Percentages may not total 100% due to rounding.

A total of 168 new HIV disease diagnoses were attributed to MSM in 2016 for the St. Louis HIV Care Region (Table 6). Blacks/African Americans represented the greatest proportion of new HIV cases and new stage 3 (AIDS) cases diagnosed in 2016 among MSM. Of the newly diagnosed cases among MSM, 19% progressed to stage 3 (AIDS) by the end of 2016. Among MSM living with HIV disease, blacks/African Americans represented the largest proportion of living HIV and stage 3 (AIDS) cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 7). Among white MSM living with HIV disease, the majority (62%) were between 45 and 64 years of age at the end of 2016. In contrast, the greatest proportion of black/African American (47%) MSM living with HIV disease was between 25 and 44 years of age.

There were differences in the distribution of persons living with HIV disease by race/ethnicity among the geographic areas for MSM (Table 8). Black/African American MSM comprised a larger proportion of persons living with HIV disease in St. Louis City and St. Louis County compared to other areas.

Table 9. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men and inject drugs, by selected race/ethnicity, St. Louis HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	0	--	32	47.1%	0	--	52	47.7%
Black/African American	0	--	33	48.5%	0	--	54	49.5%
Hispanic	0	--	3	4.4%	0	--	1	0.9%
Other/Unknown	0	--	0	0.0%	0	--	2	1.8%
ST. LOUIS HIV CARE REGION TOTAL	0	--	68	100.0%	0	--	109	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

Note: Percentages may not total 100% due to rounding.

Table 10. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity and current age group, St. Louis HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	1.2%	1	1.1%	0	0.0%	2	1.1%
25-44	24	28.6%	21	24.1%	3	75.0%	50	28.2%
45-64	53	63.1%	59	67.8%	1	25.0%	113	63.8%
65+	6	7.1%	6	6.9%	0	0.0%	12	6.8%
ST. LOUIS HIV CARE REGION TOTAL	84	100.0%	87	100.0%	4	100.0%	177	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 11. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity and geographic area, St. Louis HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	46	41.1%	61	54.5%	3	2.7%	112	63.3%
St. Louis County	25	49.0%	26	51.0%	0	0.0%	51	28.8%
St. Charles County	6	85.7%	0	0.0%	1	14.3%	7	4.0%
Remaining Counties	7	100.0%	0	0.0%	0	0.0%	7	4.0%
ST. LOUIS HIV CARE REGION TOTAL	84	47.5%	87	49.2%	4	2.3%	177	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

Note: Percentages may not total 100% due to rounding.

No new HIV disease diagnoses were attributed to MSM/IDU in 2016 for the St. Louis HIV Care Region (Table 9). There were 177 living HIV disease cases attributed to MSM/IDU at the end of 2016 in the St. Louis HIV Care Region. The number of living HIV cases and living stage 3 (AIDS) cases among MSM/IDU was nearly equal among blacks/African Americans and whites.

The majority of persons living with HIV disease among both white and black/African American MSM/IDU were 45 to 64 years old at the end of 2016 and between 25 and 44 years old among Hispanics (Table 10).

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM/IDU (Table 11). Black/African American MSM/IDU comprised a larger proportion of living cases in St. Louis City and St. Louis County compared to other areas.

Table 12. Newly diagnosed and living HIV and stage 3 (AIDS) cases in injection drug users, by selected race/ethnicity and sex, St. Louis HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	1	16.7%	16	18.8%	1	100.0%	20	14.1%
Black/African American Male	2	33.3%	31	36.5%	0	0.0%	62	43.7%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	2	1.4%
White Female	2	33.3%	18	21.2%	0	0.0%	20	14.1%
Black/African American Female	1	16.7%	17	20.0%	0	0.0%	36	25.4%
Hispanic Female	0	0.0%	1	1.2%	0	0.0%	1	0.7%
ST. LOUIS HIV CARE REGION TOTAL†	6	100.0%	85	100.0%	1	100.0%	142	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 13. Living HIV disease cases in injection drug users, by selected race/ethnicity and current age group, St. Louis HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	1	1.1%	0	0.0%	0	0.0%	1	0.4%
25-44	3	8.3%	15	16.1%	15	39.5%	11	20.8%	46	20.3%
45-64	31	86.1%	63	67.7%	23	60.5%	39	73.6%	159	70.0%
65+	2	5.6%	14	15.1%	0	0.0%	3	5.7%	21	9.3%
ST. LOUIS HIV CARE REGION TOTAL	36	100.0%	93	100.0%	38	100.0%	53	100.0%	227	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 14. Living HIV disease cases in injection drug users, by selected race/ethnicity and geographic area, St. Louis HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	24	17.1%	111	79.3%	3	2.1%	140	61.7%
St. Louis County	20	35.7%	34	60.7%	1	1.8%	56	24.7%
St. Charles County	12	100.0%	0	0.0%	0	0.0%	12	5.3%
Remaining Counties	18	94.7%	1	5.3%	0	0.0%	19	8.4%
ST. LOUIS HIV CARE REGION TOTAL	74	32.6%	146	64.3%	4	1.8%	227	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

Note: Percentages may not total 100% due to rounding.

A total of seven new HIV disease diagnoses were attributed to IDU in 2016 for the St. Louis HIV Care Region (Table 12). Of the newly diagnosed cases among IDU, one progressed to stage 3 (AIDS) by the end of 2016. There were 227 persons living with HIV disease attributed to IDU at the end of 2016 in the St. Louis HIV Care Region. Black/African American males represented the largest proportion of both living HIV and stage 3 (AIDS) cases.

At the end of 2016, the greatest proportion of IDU cases living with HIV disease was among individuals 45 to 64 years of age for all race/ethnicity categories (Table 13).

There were differences in the distribution of IDU living with HIV disease by race/ethnicity among the geographic areas (Table 14). St. Louis City had the largest proportion of black/African American IDU living with HIV disease (79%).

Table 15. Newly diagnosed and living HIV and stage 3 (AIDS) cases in heterosexual contacts, by selected race/ethnicity and sex, St. Louis HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	2	4.5%	28	5.5%	2	13.3%	29	5.7%
Black/African American Male	10	22.7%	96	18.8%	2	13.3%	120	23.5%
Hispanic Male	0	0.0%	4	0.8%	0	0.0%	4	0.8%
White Female	7	15.9%	80	15.7%	2	13.3%	62	12.1%
Black/African American Female	21	47.7%	279	54.6%	9	60.0%	277	54.2%
Hispanic Female	2	4.5%	13	2.5%	0	0.0%	9	1.8%
ST. LOUIS HIV CARE REGION TOTAL†	44	100.0%	511	100.0%	15	100.0%	511	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 16. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex and current age group, St. Louis HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	4	0.7%	5	0.5%
19-24	0	0.0%	7	3.2%	2	1.4%	26	4.7%	37	3.6%
25-44	11	19.3%	82	38.0%	46	32.4%	251	45.1%	420	41.1%
45-64	36	63.2%	110	50.9%	78	54.9%	255	45.9%	493	48.2%
65+	10	17.5%	17	7.9%	16	11.3%	20	3.6%	67	6.6%
ST. LOUIS HIV CARE REGION TOTAL	57	100.0%	216	100.0%	142	100.0%	556	100.0%	1,022	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 17. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and geographic area, St. Louis HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	71	13.2%	443	82.2%	15	2.8%	539	52.7%
St. Louis County	80	19.2%	316	75.8%	13	3.1%	417	40.8%
St. Charles County	16	55.2%	10	34.5%	1	3.4%	29	2.8%
Remaining Counties	32	86.5%	3	8.1%	1	2.7%	37	3.6%
ST. LOUIS HIV CARE REGION TOTAL	199	19.5%	772	75.5%	30	2.9%	1,022	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race in each area.

***Percentage of cases per area.

Note: Percentages may not total 100% due to rounding.

There were 59 new HIV disease diagnoses attributed to heterosexual contact in 2016 for the St. Louis HIV Care Region (Table 15). There were 1,022 persons living with HIV disease attributed to heterosexual contact at the end of 2016 in the St. Louis HIV Care Region. Black/African American females represented the largest proportion of both living HIV and stage 3 (AIDS) cases among heterosexual contact cases.

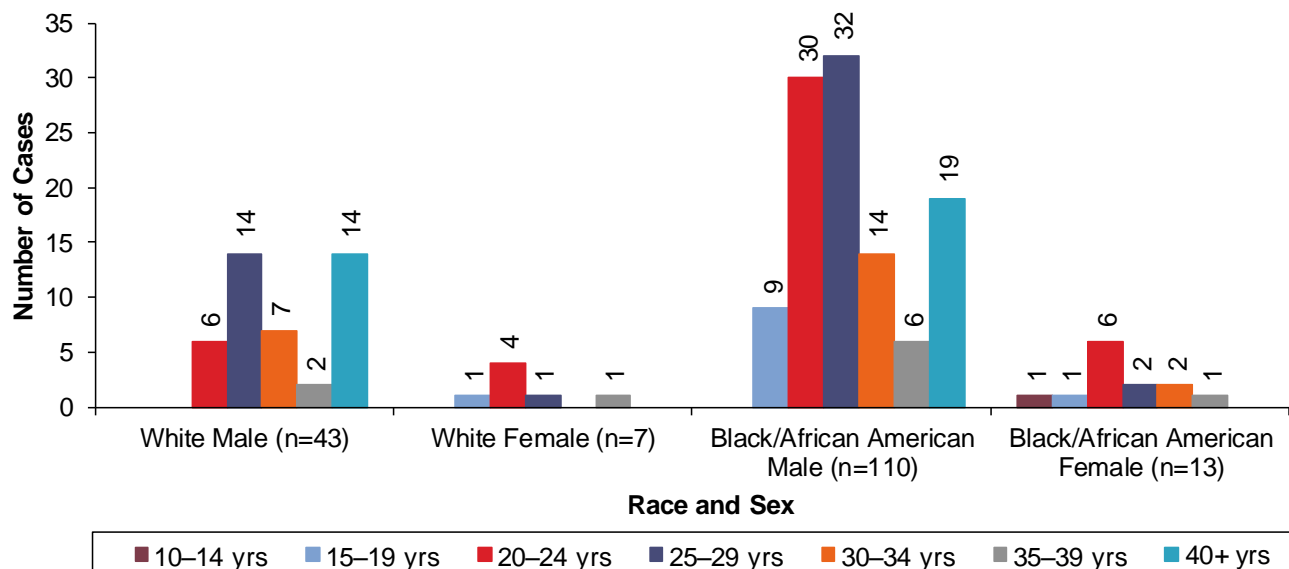
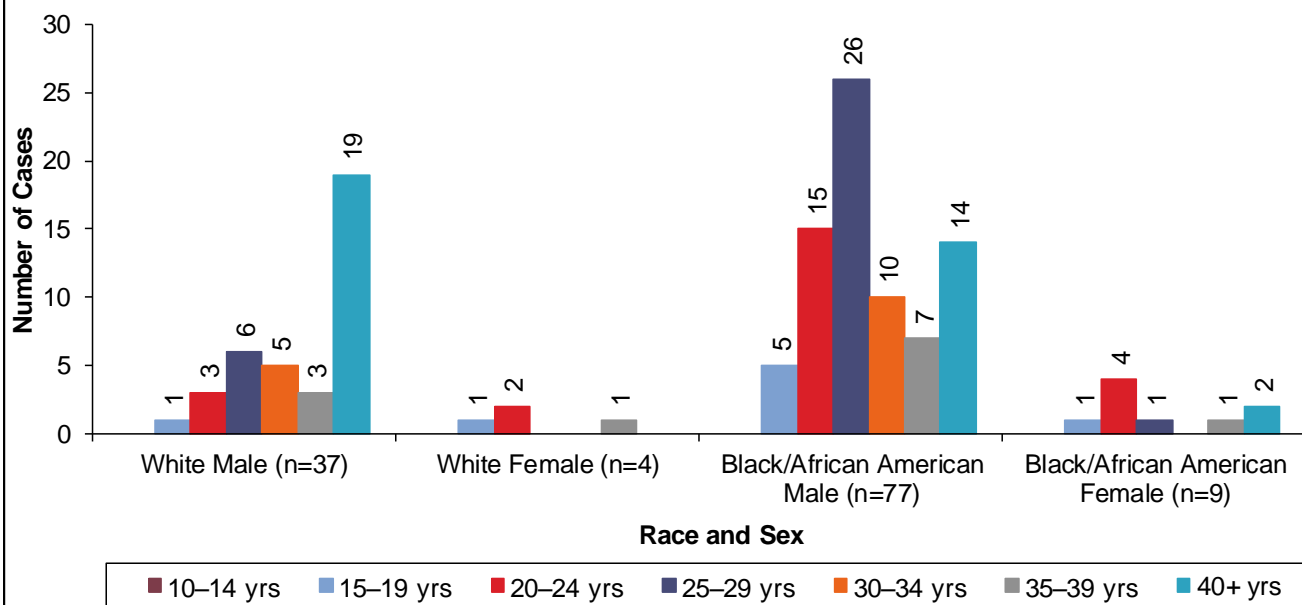
The greatest proportion of heterosexual contact cases living with HIV disease among all race/ethnicity and sex categories presented was between 45 and 64 years of age (Table 16).

There were differences in the distribution of individuals living with HIV disease by race/ethnicity among the geographic areas for heterosexual contact cases (Table 17). Black/African American heterosexual contact cases comprised a larger proportion of living cases in St. Louis City and St. Louis County compared to other areas.

Table 18. Newly diagnosed and living HIV and stage 3 (AIDS) cases, by exposure category assignment, St. Louis HIV Care Region, 2016

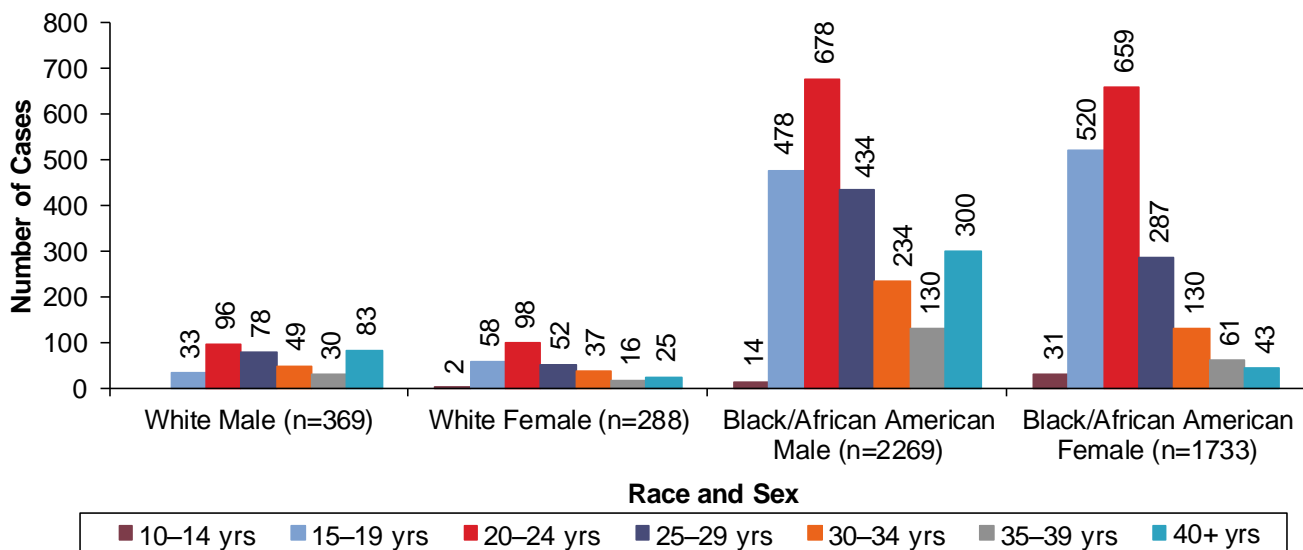
Exposure Category	HIV Cases				Stage 3 (AIDS) Cases			
	2016*		Living		2016**		Living	
Adult/Adolescent								
Men who have sex with men	149	74.5%	2,233	72.8%	35	67.3%	2,111	69.8%
Men who have sex with men and inject drugs	0	0.0%	76	2.5%	0	0.0%	117	3.9%
Injecting drug use	6	3.0%	100	3.3%	1	1.9%	162	5.4%
Heterosexual contact	45	22.5%	652	21.3%	16	30.8%	615	20.3%
Hemophilia/coagulation disorder	0	0.0%	3	0.1%	0	0.0%	18	0.6%
Blood transfusion or tissue recipient	0	0.0%	1	0.0%	0	0.0%	1	0.0%
No indicated risk (NIR)	-----	-----	-----	-----	-----	-----	-----	-----
ADULT/ADOLESCENT SUBTOTAL	200 †	100.0%	3,066 †	100.0%	52	100.0%	3,025 †	100.0%
Pediatric (<13 years old)								
PEDIATRIC SUBTOTAL	4	100.0%	38	100.0%	0	0.0%	16	100.0%
TOTAL	204		3,104		52		3,041	
*HIV cases reported during 2016 which remained HIV cases at the end of the year. **Does not include HIV cases that progressed to stage 3 (AIDS). †Includes one case with a confirmed "other" exposure category among persons living with HIV and one case among persons living with stage 3 (AIDS). Note: Percentages may not total 100% due to rounding.								

The data in Table 18 have been adjusted to proportionately redistribute individuals with no indicated risk factor to known exposure categories based on sex and race/ethnicity. These data do not reflect the true counts of persons reported in each exposure category. Among both new and living HIV and stage 3 (AIDS) cases, MSM represented the greatest proportion of cases. Four new HIV case diagnoses were reported among children less than 13 years of age in 2016 in the St. Louis HIV Care Region.

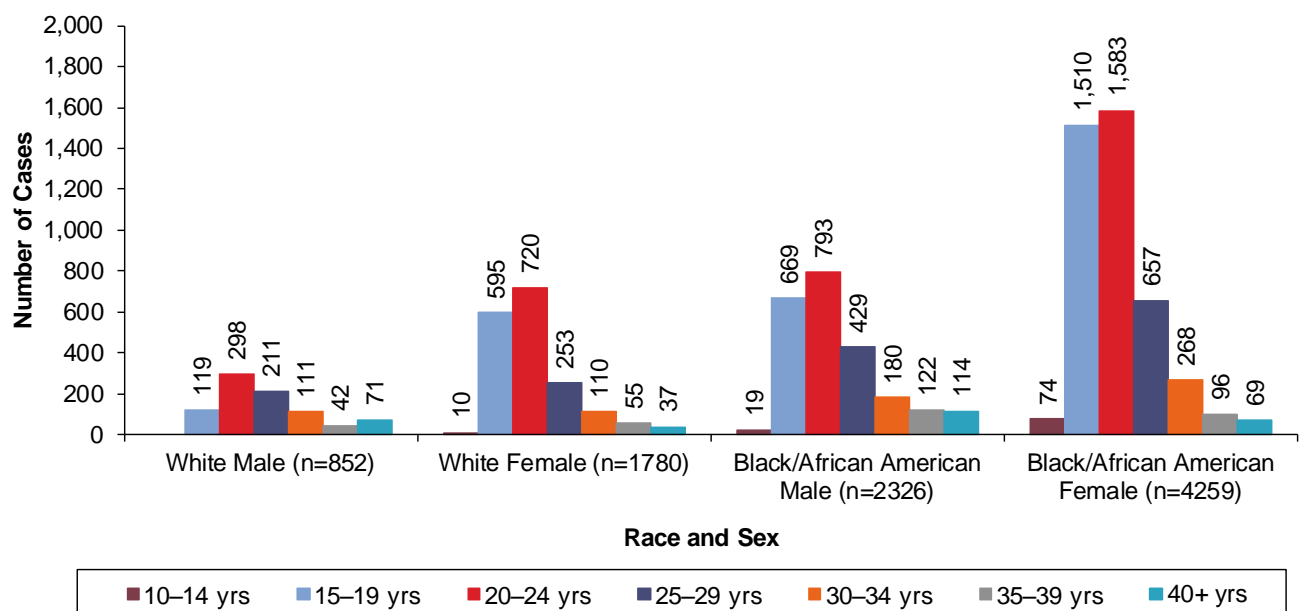
Figure 8. Reported P&S syphilis cases, by race and sex and age group at diagnosis, St. Louis HIV Care Region, 2016**Figure 9. Reported early latent syphilis cases, by race and sex and age group at diagnosis, St. Louis HIV Care Region, 2016**

The largest numbers of P&S syphilis cases were reported among black/African American males (110), followed by white males (43) (Figure 8). The numbers of reported cases increased from 2015 to 2016 among all race and sex categories presented. There were differences in the distribution of reported cases by age at diagnosis among the race and sex categories. A greater proportion of male cases was among individuals 25 to 29 years of age whereas a greater proportion of female cases was among individuals 20 to 24 years of age.

The largest numbers of early latent syphilis cases were reported among black/African American males (77), followed by white males (37) (Figure 9). The numbers of reported cases increased from 2015 to 2016 among black/African American males and decreased among all other race and sex categories. A greater proportion of white male cases was among persons 40 years of age or older, whereas a greater proportion of black/African American male cases was among persons 25 to 29 years of age.

Figure 10. Reported gonorrhea cases, by race and sex and age group at diagnosis, St. Louis HIV Care Region, 2016

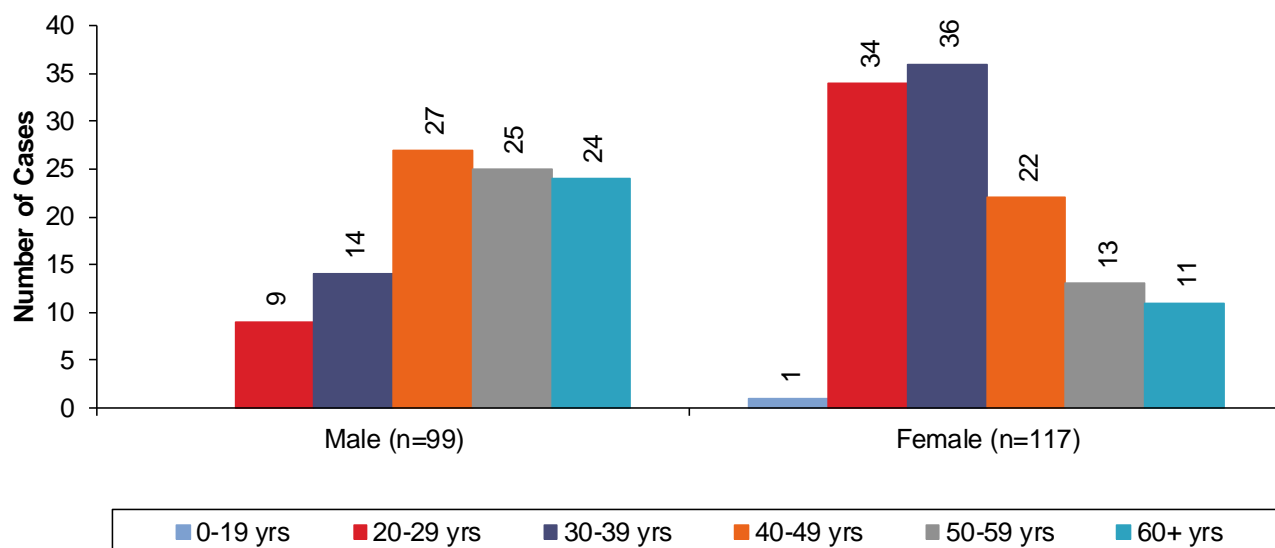
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

Figure 11. Reported chlamydia cases, by race and sex and age group at diagnosis, St. Louis HIV Care Region, 2016

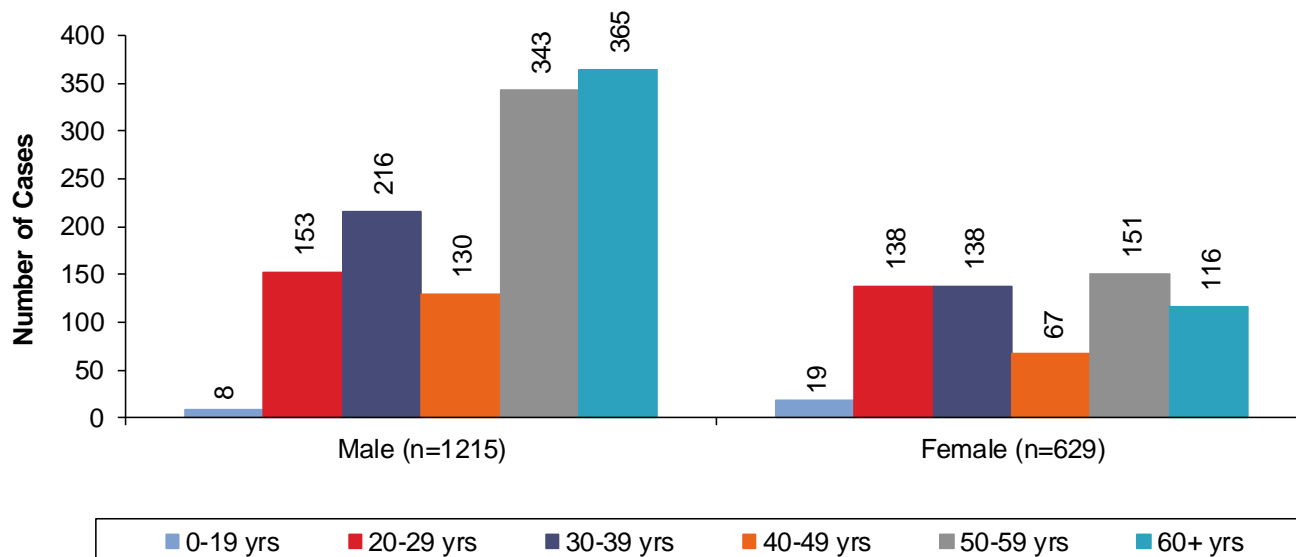
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest numbers of gonorrhea cases were reported among black/African American males (2,269), followed by black/African American females (1,733) (Figure 10). The numbers of reported cases increased from 2015 to 2016 among all race and sex categories presented. The largest numbers of cases were diagnosed between 20 and 24 years of age among all race and sex categories presented.

The largest numbers of chlamydia cases were reported among black/African American females (4,259), followed by black/African American males (2,326). The numbers of reported cases increased from 2015 to 2016 among all race and sex categories presented. Individuals 20 to 24 years of age represented the largest number of reported cases among all race and sex categories presented.

Figure 12. Reported hepatitis B cases, by sex and age group at diagnosis, St. Louis HIV Care Region, 2016

Note: Totals include persons whose age at diagnosis is unknown.

Figure 13. Reported hepatitis C cases, by sex and age group at diagnosis, St. Louis HIV Care Region, 2016

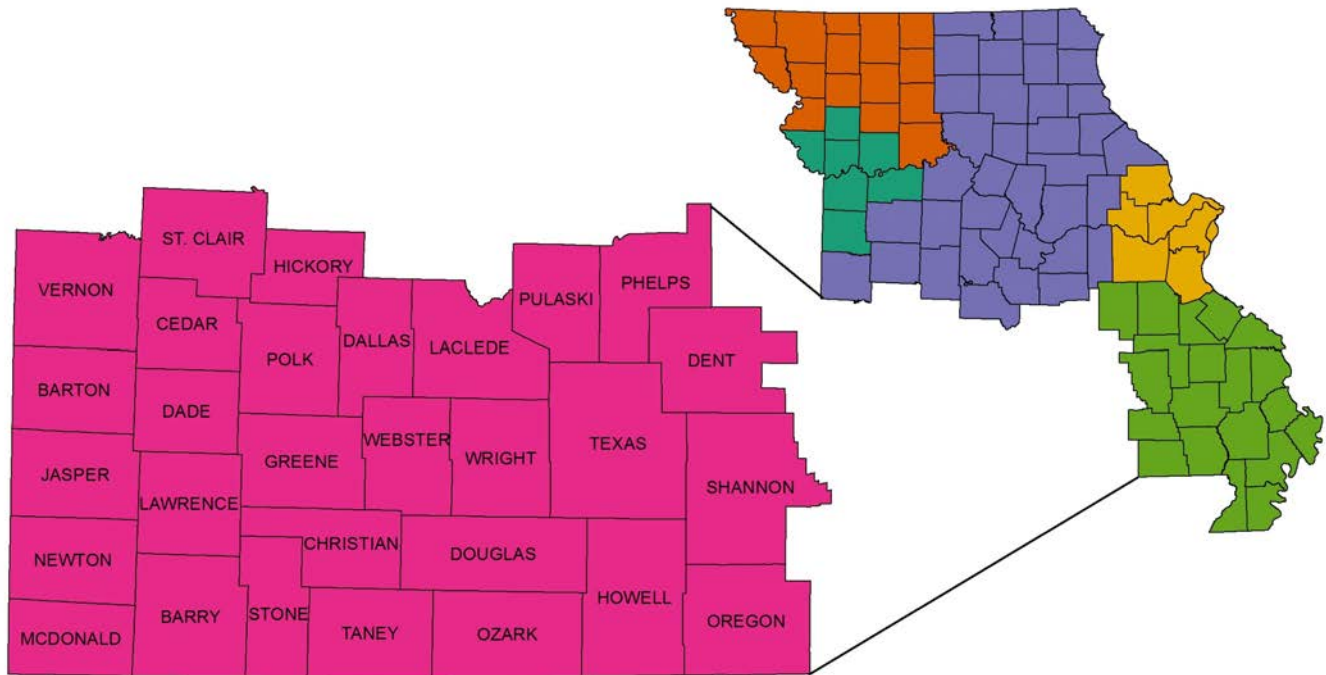
Note: Totals include persons whose age at diagnosis is unknown.

There were 216 reported cases of hepatitis B in the St. Louis HIV Care Region during 2016 (Figure 12). Females represented 60% of reported hepatitis B cases. There were differences in the age distribution of reported hepatitis B cases by sex. Among males, the greatest numbers of cases were 40 to 49 years of age at diagnosis. The largest proportion of female cases was 30 to 39 years of age.

In 2016, there were 1,844 hepatitis C cases reported in the St. Louis HIV Care Region (Figure 13). Of the reported cases, 66% were male. Among males, the largest numbers of cases were reported among persons 60 or more years of age at diagnosis. Among females, the largest numbers of cases were reported among persons 50 to 59 years of age at diagnosis.

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SOUTHWEST HIV CARE REGION



Population Counts, Southwest HIV Care Region, 2015

County	White		Black/African American		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races/Other Race		Total
Barry County	30,932	86.3%	156	0.4%	3,236	9.0%	610	1.7%	338	0.9%	557	1.6%	35,829
Barton County	10,969	92.3%	78	0.7%	321	2.7%	80	0.7%	155	1.3%	277	2.3%	11,880
Cedar County	13,194	94.7%	48	0.3%	317	2.3%	64	0.5%	97	0.7%	214	1.5%	13,934
Christian County	77,782	93.4%	679	0.8%	2,440	2.9%	560	0.7%	447	0.5%	1,371	1.6%	83,279
Dade County	7,141	94.0%	37	0.5%	152	2.0%	30	0.4%	73	1.0%	162	2.1%	7,595
Dallas County	15,538	94.8%	65	0.4%	332	2.0%	46	0.3%	137	0.8%	275	1.7%	16,393
Dent County	14,784	94.8%	92	0.6%	244	1.6%	62	0.4%	160	1.0%	251	1.6%	15,593
Douglas County	12,775	95.5%	51	0.4%	167	1.2%	54	0.4%	86	0.6%	240	1.8%	13,373
Greene County	253,826	88.1%	9,106	3.2%	10,343	3.6%	5,914	2.1%	1,694	0.6%	7,189	2.5%	288,072
Hickory County	8,750	95.1%	35	0.4%	154	1.7%	29	0.3%	76	0.8%	157	1.7%	9,201
Howell County	37,904	94.5%	210	0.5%	819	2.0%	261	0.7%	278	0.7%	645	1.6%	40,117
Jasper County	100,065	84.4%	2,479	2.1%	9,358	7.9%	1,698	1.4%	1,757	1.5%	3,239	2.7%	118,596
Laclede County	33,228	93.7%	330	0.9%	840	2.4%	195	0.5%	252	0.7%	628	1.8%	35,473
Lawrence County	34,213	89.6%	147	0.4%	2,730	7.2%	172	0.5%	314	0.8%	604	1.6%	38,180
McDonald County	17,769	78.5%	347	1.5%	2,653	11.7%	637	2.8%	565	2.5%	672	3.0%	22,643
Newton County	50,749	86.6%	573	1.0%	2,976	5.1%	1,376	2.3%	1,281	2.2%	1,660	2.8%	58,615
Oregon County	10,278	93.8%	71	0.6%	171	1.6%	48	0.4%	151	1.4%	234	2.1%	10,953
Ozark County	8,980	95.4%	31	0.3%	170	1.8%	12	0.1%	70	0.7%	146	1.6%	9,409
Phelps County	39,654	88.5%	1,084	2.4%	1,089	2.4%	1,656	3.7%	278	0.6%	1,033	2.3%	44,794
Polk County	29,207	93.5%	326	1.0%	701	2.2%	298	1.0%	211	0.7%	486	1.6%	31,229
Pulaski County	36,573	68.7%	6,318	11.9%	5,843	11.0%	1,914	3.6%	429	0.8%	2,144	4.0%	53,221
Shannon County	7,780	94.2%	25	0.3%	136	1.6%	23	0.3%	90	1.1%	204	2.5%	8,258
St. Clair County	8,917	94.5%	63	0.7%	206	2.2%	18	0.2%	69	0.7%	167	1.8%	9,440
Stone County	29,427	95.1%	133	0.4%	655	2.1%	144	0.5%	190	0.6%	394	1.3%	30,943
Taney County	48,743	89.3%	733	1.3%	3,049	5.6%	587	1.1%	456	0.8%	1,024	1.9%	54,592
Texas County	23,354	90.9%	963	3.7%	568	2.2%	99	0.4%	205	0.8%	501	2.0%	25,690
Vernon County	19,579	94.0%	176	0.8%	434	2.1%	141	0.7%	160	0.8%	336	1.6%	20,826
Webster County	35,453	94.6%	404	1.1%	741	2.0%	113	0.3%	225	0.6%	547	1.5%	37,483
Wright County	17,361	95.0%	132	0.7%	345	1.9%	72	0.4%	109	0.6%	249	1.4%	18,268
Region Total	1,034,925	88.9%	24,892	2.1%	51,190	4.4%	16,913	1.5%	10,353	0.9%	25,606	2.2%	1,163,879

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Figure 1. HIV disease cases (living and deceased), by current HIV vs. stage 3 (AIDS) status, Southwest HIV Care Region, 1982-2016

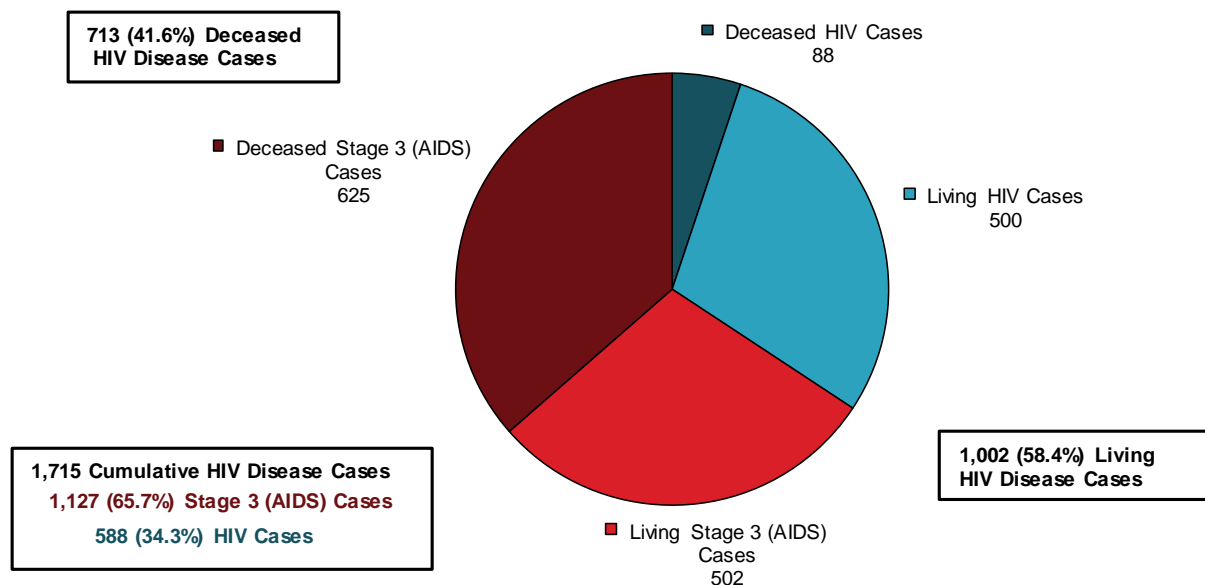
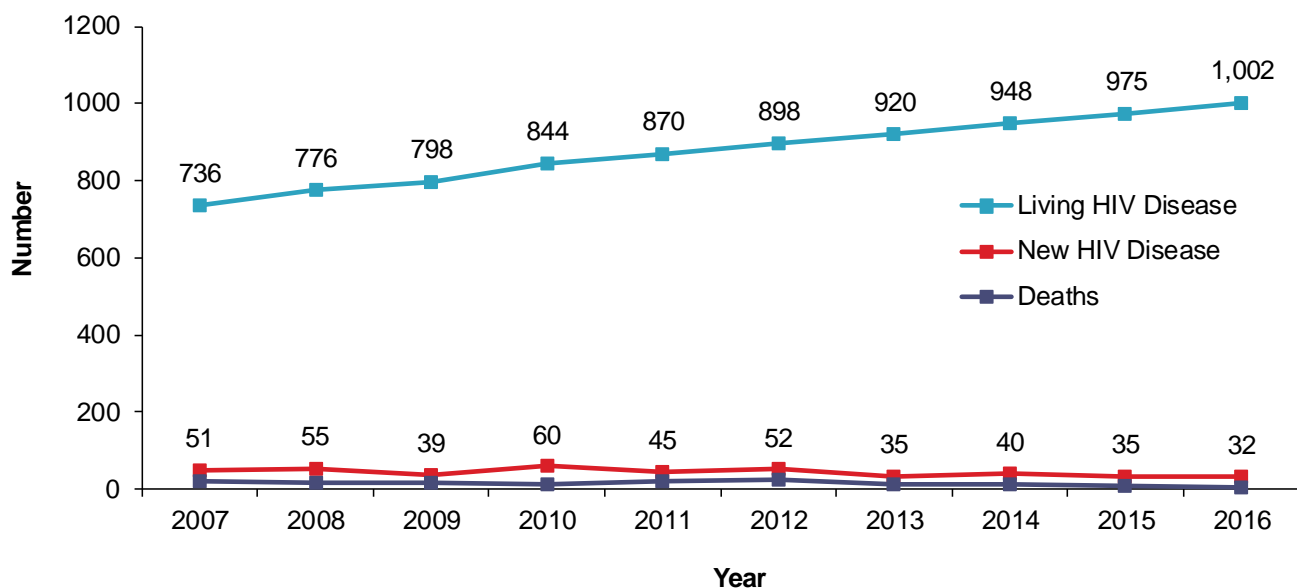


Figure 2. Living and new HIV disease cases and deaths, by year*, Southwest HIV Care Region, 2007-2016

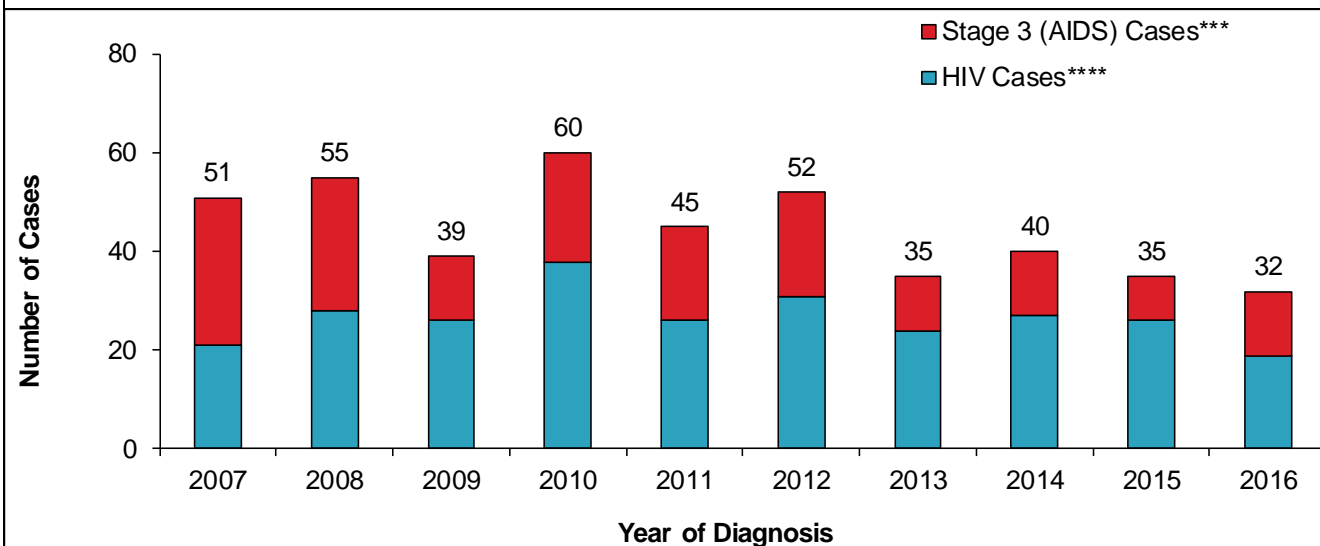


*Living HIV disease cases represent the number of individuals living with HIV disease at the end of the year. New HIV disease cases represent the number of individuals newly diagnosed in the year. HIV disease deaths represent the number of individuals that died in the year.

From 1982 to 2016, a total of 1,715 HIV disease cases were diagnosed in the Southwest HIV Care Region and reported to DHSS (Figure 1). Of the cumulative cases reported, 58% were still presumed to be living with HIV disease at the end of 2016. Among those living with HIV disease, 500 were classified as HIV cases at the end of 2016 and 502 were classified as stage 3 (AIDS) cases.

At the end of 2016, there were 1,002 persons living with HIV disease whose most recent diagnosis occurred in the Southwest HIV Care Region (Figure 2). The number of people living with HIV disease increased over time. There were 32 new HIV disease diagnoses in 2016. The number of deaths among persons with HIV disease remained generally stable.

Figure 3. HIV disease cases, by current status* and year of diagnosis, Southwest HIV Care Region, 2007-2016**



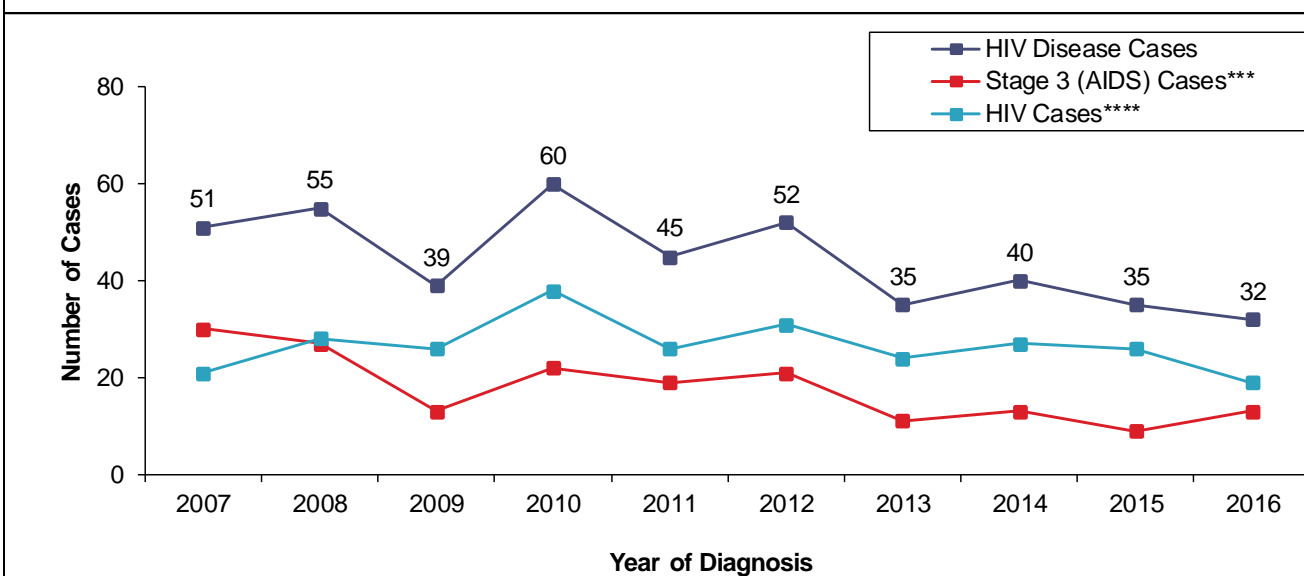
*HIV case vs. stage 3 (AIDS) case.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, Southwest HIV Care Region, 2007-2016**



*HIV case vs. stage 3 (AIDS) case.

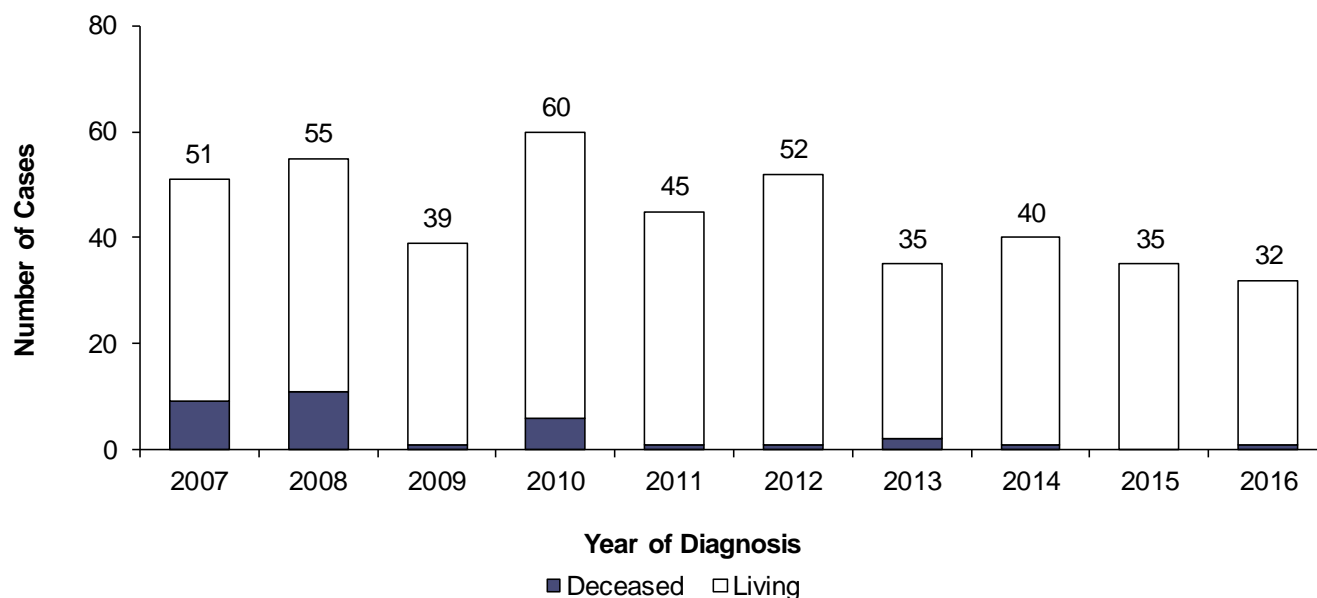
**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by DHSS).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of December 31, 2016.

The number of new diagnoses fluctuated from 2007 to 2016 in the Southwest HIV Care Region (Figures 3 and 4). The number of new HIV disease cases decreased slightly from 35 in 2015 to 32 in 2016. Differences in the number of persons sub-classified as stage 3 (AIDS) cases each year are due to the progression of the disease over time.

Figure 5. Persons diagnosed with HIV disease, by current vital status* and year of diagnosis, Southwest HIV Care Region, 2007-2016**



*Vital status on December 31, 2016.

**Cases are indicated by year of initial diagnosis reported to DHSS (i.e., the year in which the first diagnosis of the person, whether as a HIV case or a stage 3 (AIDS) case, was documented by DHSS).

Of the 51 persons diagnosed with HIV disease in 2007, 9 (18%) were deceased by the end of 2016 (Figure 5). Among the 32 persons first diagnosed in 2016, one death had been reported to DHSS at the end of 2016. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease.

Table 1. Living[†] HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Southwest HIV Care Region, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	398	79.6%	68.8	429	85.5%	74.2	827	82.5%	143.0
Female	102	20.4%	17.4	73	14.5%	12.5	175	17.5%	29.9
Total	500	100.0%	43.0	502	100.0%	43.1	1,002	100.0%	86.1
Race/Ethnicity									
White	389	77.8%	37.6	392	78.1%	37.9	781	77.9%	75.5
Black/African American	64	12.8%	257.1	61	12.2%	245.1	125	12.5%	502.2
Hispanic	31	6.2%	60.6	38	7.6%	74.2	69	6.9%	134.8
Asian/Pacific Islander	5	1.0%	29.6	5	1.0%	29.6	10	1.0%	59.1
American Indian/Alaskan Native	0	0.0%	0.0	2	0.4%	19.3	2	0.2%	19.3
Two or More Races/Unknown	11	2.2%	--	4	0.8%	--	15	1.5%	--
Total	500	100.0%	43.0	502	100.0%	43.1	1,002	100.0%	86.1
Race/Ethnicity-Males									
White Male	316	79.4%	61.9	340	79.3%	66.6	656	79.3%	128.5
Black/African American Male	44	11.1%	295.1	49	11.4%	328.7	93	11.2%	623.8
Hispanic Male	25	6.3%	92.6	32	7.5%	118.5	57	6.9%	211.2
Asian/Pacific Islander Male	4	1.0%	52.0	3	0.7%	39.0	7	0.8%	90.9
American Indian/Alaskan Native Male	0	0.0%	0.0	2	0.5%	38.1	2	0.2%	38.1
Two or More Races/Unknown Male	9	2.3%	--	3	0.7%	--	12	1.5%	--
Total	398	100.0%	68.8	429	100.0%	74.2	827	100.0%	143.0
Race/Ethnicity-Females									
White Female	73	71.6%	13.9	52	71.2%	9.9	125	71.4%	23.8
Black/African American Female	20	19.6%	200.3	12	16.4%	120.2	32	18.3%	320.5
Hispanic Female	6	5.9%	24.8	6	8.2%	24.8	12	6.9%	49.6
Asian/Pacific Islander Female	1	1.0%	10.9	2	2.7%	21.7	3	1.7%	32.6
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	2	2.0%	--	1	1.4%	--	3	1.7%	--
Total	102	100.0%	17.4	73	100.0%	12.5	175	100.0%	29.9
Current Age[‡]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	3	0.6%	1.9	0	0.0%	0.0	3	0.3%	1.9
13-18	2	0.4%	2.2	1	0.2%	1.1	3	0.3%	3.3
19-24	23	4.6%	21.2	2	0.4%	1.8	25	2.5%	23.0
25-44	212	42.4%	75.9	127	25.3%	45.5	339	33.8%	121.4
45-64	240	48.0%	81.4	325	64.7%	110.2	565	56.4%	191.6
65+	20	4.0%	10.1	47	9.4%	23.7	67	6.7%	33.8
Total	500	100.0%	43.0	502	100.0%	43.1	1,002	100.0%	86.1

[†]Includes persons diagnosed with HIV disease in the Southwest HIV Care Region who are currently living, regardless of current residence.

*Cases which remained HIV cases at the end of 2016.

**Cases classified as stage 3 (AIDS) by December 31, 2016.

***The sum of HIV cases and stage 3 (AIDS) cases.

****Per 100,000 population based on 2015 DHSS estimates.

[‡]Based on age as of December 31, 2016.

Note: Percentages may not total 100% due to rounding.

Table 2. Diagnosed HIV, stage 3 (AIDS), and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Southwest HIV Care Region, 2016

	HIV*			Stage 3 (AIDS)**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	16	84.2%	2.8	10	76.9%	1.7	26	81.3%	4.5
Female	3	15.8%	0.5	3	23.1%	0.5	6	18.8%	1.0
Total	19	100.0%	1.6	13	100.0%	1.1	32	100.0%	2.7
Race/Ethnicity									
White	10	52.6%	1.0	10	76.9%	1.0	20	62.5%	1.9
Black/African American	4	21.1%	16.1	2	15.4%	8.0	6	18.8%	24.1
Hispanic	3	15.8%	5.9	1	7.7%	2.0	4	12.5%	7.8
Asian/Pacific Islander	1	5.3%	5.9	0	0.0%	0.0	1	3.1%	5.9
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	1	5.3%	--	0	0.0%	--	1	3.1%	--
Total	19	100.0%	1.6	13	100.0%	1.1	32	100.0%	2.7
Race/Ethnicity-Males									
White Male	9	56.3%	1.8	8	80.0%	1.6	17	65.4%	3.3
Black/African American Male	2	12.5%	13.4	1	10.0%	6.7	3	11.5%	20.1
Hispanic Male	3	18.8%	11.1	1	10.0%	3.7	4	15.4%	14.8
Asian/Pacific Islander Male	1	6.3%	13.0	0	0.0%	0.0	1	3.8%	13.0
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	1	6.3%	--	0	0.0%	--	1	3.8%	--
Total	16	100.0%	2.8	10	100.0%	1.7	26	100.0%	4.5
Race/Ethnicity-Females									
White Female	1	33.3%	0.2	2	66.7%	0.4	3	50.0%	0.6
Black/African American Female	2	66.7%	20.0	1	33.3%	10.0	3	50.0%	30.1
Hispanic Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	3	100.0%	0.5	3	100.0%	0.5	6	100.0%	1.0
Current Age[†]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
19-24	7	36.8%	6.4	0	0.0%	0.0	7	21.9%	6.4
25-44	9	47.4%	3.2	7	53.8%	2.5	16	50.0%	5.7
45-64	3	15.8%	1.0	6	46.2%	2.0	9	28.1%	3.1
65+	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Total	19	100.0%	1.6	13	100.0%	1.1	32	100.0%	2.7

*HIV cases diagnosed during 2016 which remained HIV cases at the end of the year.

**Stage 3 (AIDS) cases initially diagnosed in 2016.

***The sum of newly diagnosed HIV cases and newly diagnosed stage 3 (AIDS) cases. Does not include cases diagnosed prior to 2016 with HIV, which progressed to stage 3 (AIDS) in 2016.

****Per 100,000 population based on 2015 DHSS estimates.

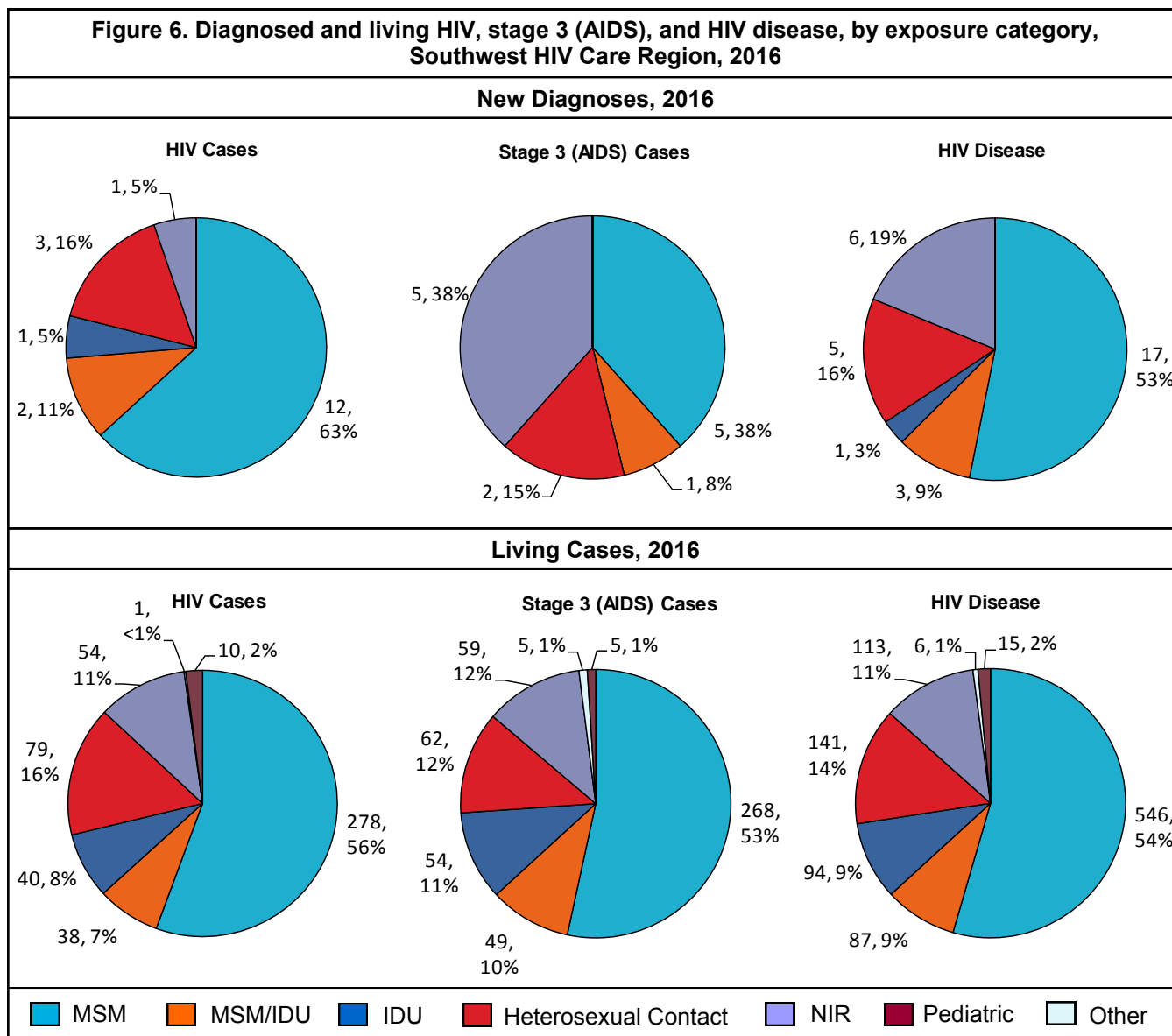
†Based on age as of December 31, 2016.

Note: Percentages may not total 100% due to rounding.

Epi Profiles Summary: Southwest HIV Care Region

Of the 1,002 persons living with HIV disease at the end of 2016, 83% were males (Table 1). The rate of those living with HIV disease among males was 4.8 times as high as the rate among females. Although whites represented the largest proportion of persons living with HIV disease (78%), the rate of those living with HIV disease among blacks/African Americans was 6.7 times as high as the rate among whites. The rate among Hispanics was 1.8 times as high as the rate among whites. Among males, the rate of persons living with HIV disease among blacks/African Americans was 4.9 times as high as the rate for whites, and the rate among Hispanics was 1.6 times as high as the rate for whites. Among females, the rate of those living with HIV disease among blacks/African Americans was 13.5 times as high as the rate among whites, and the rate among Hispanics was 2.1 times as high as the rate among whites. The difference in the rates between Hispanic and white females should be interpreted with some caution due to the small number of Hispanic females living with HIV disease.

Of the 32 persons newly diagnosed with HIV disease in 2016, 41% were classified as stage 3 (AIDS) cases by the end of 2016 (Table 2). Whites represented the majority of new HIV disease diagnoses (63%).



Among all known exposure categories, the largest proportion of cases was attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and stage 3 (AIDS) cases and rates, by geographic area, Southwest HIV Care Region, 2016

Geographic Area	HIV cases						Stage 3 (AIDS) cases					
	Diagnosed 2016*			Living			Diagnosed 2016**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Greene County	4	21.1%	1.4	234	46.8%	81.2	6	46.2%	2.1	216	43.0%	75.0
Jasper County	3	15.8%	2.5	68	13.6%	57.3	0	0.0%	0.0	73	14.5%	61.6
Pulaski County	3	15.8%	5.6	30	6.0%	56.4	1	7.7%	1.9	19	3.8%	35.7
Christian County	0	0.0%	0.0	26	5.2%	31.2	0	0.0%	0.0	16	3.2%	19.2
Taney County	0	0.0%	0.0	25	5.0%	45.8	0	0.0%	0.0	24	4.8%	44.0
Remainder of Region	9	47.4%	1.6	117	23.4%	20.7	6	46.2%	1.1	154	30.7%	27.2
SOUTHWEST HIV CARE REGION TOTAL	19	100.0%	1.6	500	100.0%	43.0	13	100.0%	1.1	502	100.0%	43.1

*HIV cases diagnosed and reported to the Department during 2016 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

***Per 100,000 population based on 2015 DHSS estimates.

Note: Percentages may not total 100% due to rounding.

The largest number of new HIV cases (10) was diagnosed in Greene County (Table 3). The highest rates of persons living with HIV and stage 3 (AIDS) were also observed among persons diagnosed in Greene County.

Table 4. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men, by selected race/ethnicity, Southwest HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	7	58.3%	230	82.7%	4	80.0%	227	84.7%
Black/African American	1	8.3%	20	7.2%	0	0.0%	23	8.6%
Hispanic	2	16.7%	19	6.8%	1	20.0%	13	4.9%
Other/Unknown	2	16.7%	9	3.2%	0	0.0%	5	1.9%
SOUTHWEST HIV CARE REGION TOTAL	12	100.0%	278	100.0%	5	100.0%	268	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

Note: Percentages may not total 100% due to rounding.

Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity and current age group, Southwest HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	9	2.0%	3	7.0%	0	0.0%	14	2.6%
25-44	150	32.8%	22	51.2%	18	56.3%	201	36.8%
45-64	269	58.9%	18	41.9%	11	34.4%	298	54.6%
65+	29	6.3%	0	0.0%	3	9.4%	33	6.0%
SOUTHWEST HIV CARE REGION TOTAL	457	100.0%	43	100.0%	32	100.0%	546	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 6. Living HIV disease cases in men who have sex with men, by selected race/ethnicity and geographic area, Southwest HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Greene County	225	84.6%	19	7.1%	15	5.6%	266	48.7%
Jasper County	65	84.4%	7	9.1%	3	3.9%	77	14.1%
Taney County	21	87.5%	1	4.2%	2	8.3%	24	4.4%
Remaining Counties	146	81.6%	16	8.9%	12	6.7%	179	32.8%
SOUTHWEST HIV CARE REGION TOTAL	457	83.7%	43	7.9%	32	5.9%	546	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race in each area.

***Percentage of cases per area.

Note: Percentages may not total 100% due to rounding.

There were 17 new HIV disease diagnoses attributed to MSM in 2016 for the Southwest HIV Care Region (Table 4). Seventy-one percent (71%) of new diagnoses remained sub-classified as HIV cases at the end of 2016. Whites represented the greatest proportion of new HIV and stage 3 (AIDS) case diagnoses. There were 546 living HIV disease cases attributed to MSM in the Southwest HIV Care Region. Whites represented the greatest proportion of living HIV and stage 3 (AIDS) cases.

The greatest proportion of living cases attributed to MSM was among those between 45 and 64 years old (55%) at the end of 2016 (Table 5). Greater proportions of blacks/African Americans (51%) and Hispanics (56%) were between 25 and 44 years of age compared to whites (33%).

Greene County residents accounted for the largest number of MSM living with HIV in the Southwest HIV Care Region (Table 6). The distributions of living cases by race/ethnicity among the geographic areas were similar.

Table 7. Newly diagnosed and living HIV and stage 3 (AIDS) cases in men who have sex with men and inject drugs, by selected race/ethnicity, Southwest HIV Care Region, 2016

Race/Ethnicity	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	1	50.0%	36	94.7%	1	100.0%	40	81.6%
Black/African American	0	0.0%	0	0.0%	0	0.0%	4	8.2%
Hispanic	1	50.0%	1	2.6%	0	0.0%	4	8.2%
Other/Unknown	0	0.0%	1	2.6%	0	0.0%	1	2.0%
SOUTHWEST HIV CARE REGION TOTAL	2	100.0%	38	100.0%	1	100.0%	49	100.0%

*Remained HIV cases at the end of the year.
 **Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.
 Note: Percentages may not total 100% due to rounding.

Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity and current age group, Southwest HIV Care Region, 2016

Age Group	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	2	2.6%	0	0.0%	1	20.0%	3	3.4%
25-44	27	35.5%	0	0.0%	2	40.0%	30	34.5%
45-64	43	56.6%	4	100.0%	2	40.0%	50	57.5%
65+	4	5.3%	0	0.0%	0	0.0%	4	4.6%
SOUTHWEST HIV CARE REGION TOTAL	76	100.0%	4	100.0%	5	100.0%	87	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.
 **Percentage of cases per age group.
 Note: Percentages may not total 100% due to rounding.

Table 9. Living HIV disease cases in men who have sex with men and inject drugs, by geographic area, Southwest HIV Care Region, 2016

Geographic Area	Total	
	Cases	%
Greene County	46	52.9%
Jasper County	11	12.6%
Taney County	7	8.0%
Remaining Counties	23	26.4%
SOUTHWEST HIV CARE REGION TOTAL	87	100.0%

Note: Percentages may not total 100% due to rounding.

Three new HIV disease diagnoses were attributed to MSM/IDU in 2016 for the Southwest HIV Care Region (Table 7). There were 87 MSM/IDU living with HIV disease at the end of 2016 whose most recent diagnosis occurred in the Southwest HIV Care Region. Whites comprised a greater proportion of those living with HIV (95%) compared to the proportion of those living with stage 3 (AIDS) (82%).

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM/IDU (Table 8). Among whites and blacks/African Americans, the largest numbers of living cases were 45 to 64 years of age at the end of 2016. Among Hispanics, there were equal numbers of living cases between 25 to 44 years of age and 45 to 64 years of age.

Greene County residents accounted for the largest number (46) of MSM/IDU living with HIV in the Southwest HIV Care Region (Table 9).

Table 10. Newly diagnosed and living HIV and stage 3 (AIDS) cases in injection drug users, by selected race/ethnicity and sex, Southwest HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	1	100.0%	16	40.0%	0	--	24	44.4%
Black/African American Male	0	0.0%	8	20.0%	0	--	6	11.1%
Hispanic Male	0	0.0%	1	2.5%	0	--	6	11.1%
White Female	0	0.0%	13	32.5%	0	--	13	24.1%
Black/African American Female	0	0.0%	2	5.0%	0	--	2	3.7%
Hispanic Female	0	0.0%	0	0.0%	0	--	2	3.7%
SOUTHWEST HIV CARE REGION TOTAL[†]	1	100.0%	40	100.0%	0	--	54	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

[†]Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 11. Living HIV disease cases in injection drug users, by selected race/ethnicity and current age group, Southwest HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25-44	9	22.5%	1	7.1%	8	30.8%	1	25.0%	20	21.3%
45-64	29	72.5%	10	71.4%	18	69.2%	3	75.0%	68	72.3%
65+	2	5.0%	3	21.4%	0	0.0%	0	0.0%	6	6.4%
SOUTHWEST HIV CARE REGION TOTAL	40	100.0%	14	100.0%	26	100.0%	4	100.0%	94	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 12. Living HIV disease cases in injecting drug users, by geographic area, Southwest HIV Care Region, 2016

Geographic Area	Total	
	Cases	%
Greene County	43	45.7%
Jasper County	13	13.8%
Remaining Counties	26	27.7%
SOUTHWEST HIV CARE REGION TOTAL	94	100.0%

Note: Percentages may not total 100% due to rounding.

One new HIV disease diagnosis was attributed to IDU in 2016 for the Southwest HIV Care Region (Table 10). There were 94 living HIV disease cases attributed to IDU at the end of 2016 in the Southwest HIV Care Region. Of the living HIV disease cases, 57% were classified as stage 3 (AIDS) at the end of 2016. White males represented the largest proportion of both living stage 3 (AIDS) cases (44%) and living HIV cases (40%).

Overall, persons 45 to 64 years of age represented the largest number (68) of living HIV disease cases among IDU in the Southwest HIV Care Region (Table 11).

Greene County had the largest number of living HIV disease cases attributed to IDU in 2016 (Table 12).

Table 13. Newly diagnosed and living HIV and stage 3 (AIDS) cases in heterosexual contacts, by selected race/ethnicity and sex, Southwest HIV Care Region, 2016

Race/Ethnicity and Sex	HIV Cases*				Stage 3 (AIDS) Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	9	11.4%	0	0.0%	12	19.4%
Black/African American Male	0	0.0%	7	8.9%	0	0.0%	7	11.3%
Hispanic Male	0	0.0%	2	2.5%	0	0.0%	2	3.2%
White Female	1	33.3%	44	55.7%	1	50.0%	29	46.8%
Black/African American Female	2	66.7%	12	15.2%	1	50.0%	7	11.3%
Hispanic Female	0	0.0%	3	3.8%	0	0.0%	2	3.2%
SOUTHWEST HIV CARE REGION TOTAL†	3	100.0%	79	100.0%	2	100.0%	62	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2016 that progressed to stage 3 (AIDS) in 2016.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total 100% due to rounding.

Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex and current age group, Southwest HIV Care Region, 2016

Age Group	White Males		Black/African American Males		White Females		Black/African American Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	1	1.4%	0	0.0%	1	0.7%
25-44	1	4.8%	2	14.3%	26	35.6%	8	42.1%	44	31.2%
45-64	15	71.4%	11	78.6%	41	56.2%	11	57.9%	84	59.6%
65+	5	23.8%	1	7.1%	5	6.8%	0	0.0%	12	8.5%
SOUTHWEST HIV CARE REGION TOTAL	21	100.0%	14	100.0%	73	100.0%	19	100.0%	141	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total 100% due to rounding.

Table 15. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and geographic area, Southwest HIV Care Region, 2016

Geographic Area	White		Black/African American		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Greene County	23	50.0%	19	41.3%	3	6.5%	46	32.6%
Jasper County	13	68.4%	3	15.8%	3	15.8%	19	13.5%
Pulaski County	2	22.2%	7	77.8%	0	0.0%	9	6.4%
Remaining Counties	56	83.6%	4	6.0%	3	4.5%	67	47.5%
SOUTHWEST HIV CARE REGION TOTAL	94	66.7%	33	23.4%	9	6.4%	141	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race in each area.

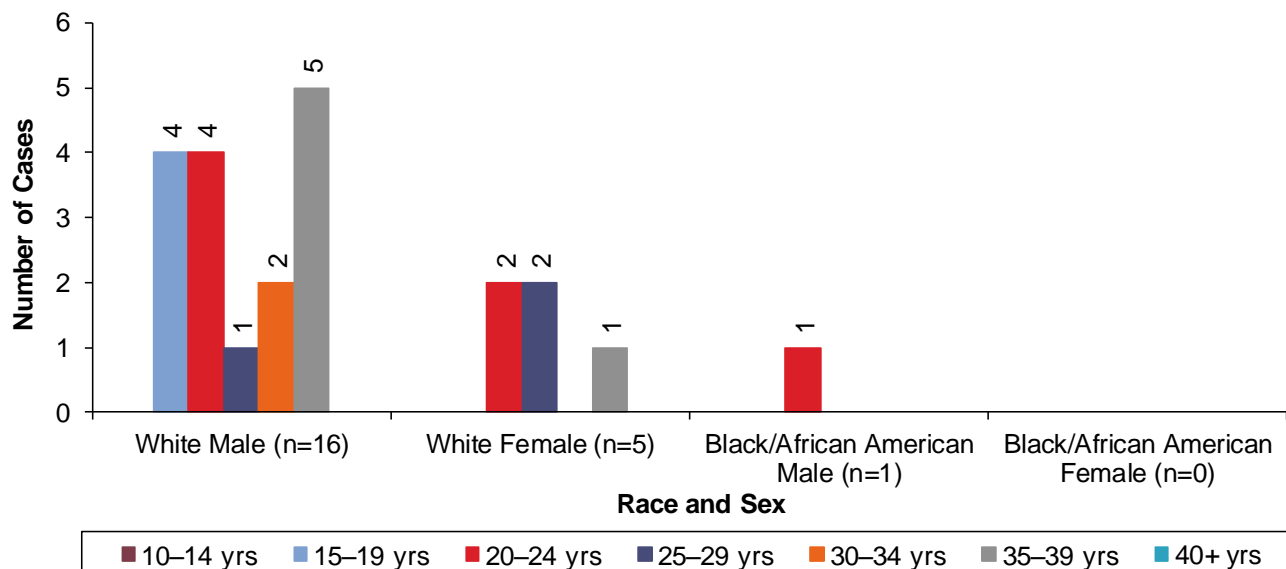
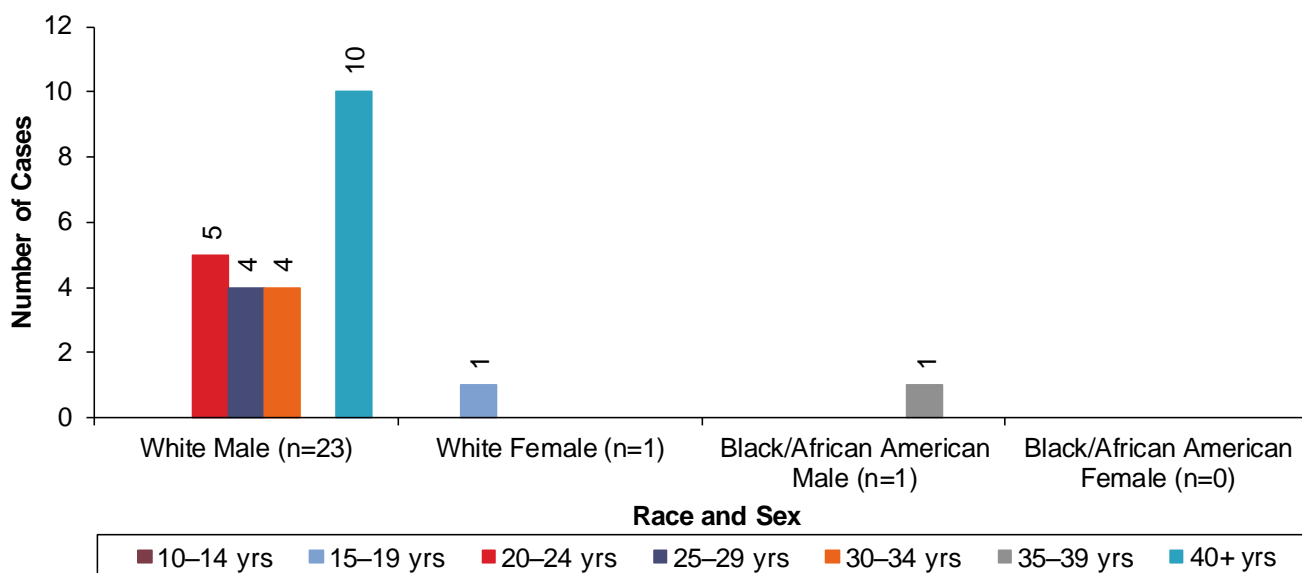
***Percentage of cases per area.

Note: Percentages may not total 100% due to rounding.

Five new HIV disease diagnoses were attributed to heterosexual contact in 2016 for the Southwest HIV Care Region (Table 13). There were 141 living HIV disease cases attributed to heterosexual contact at the end of 2016 in the Southwest HIV Care Region. White females represented the largest proportion of both living HIV (56%) and stage 3 (AIDS) (47%) cases.

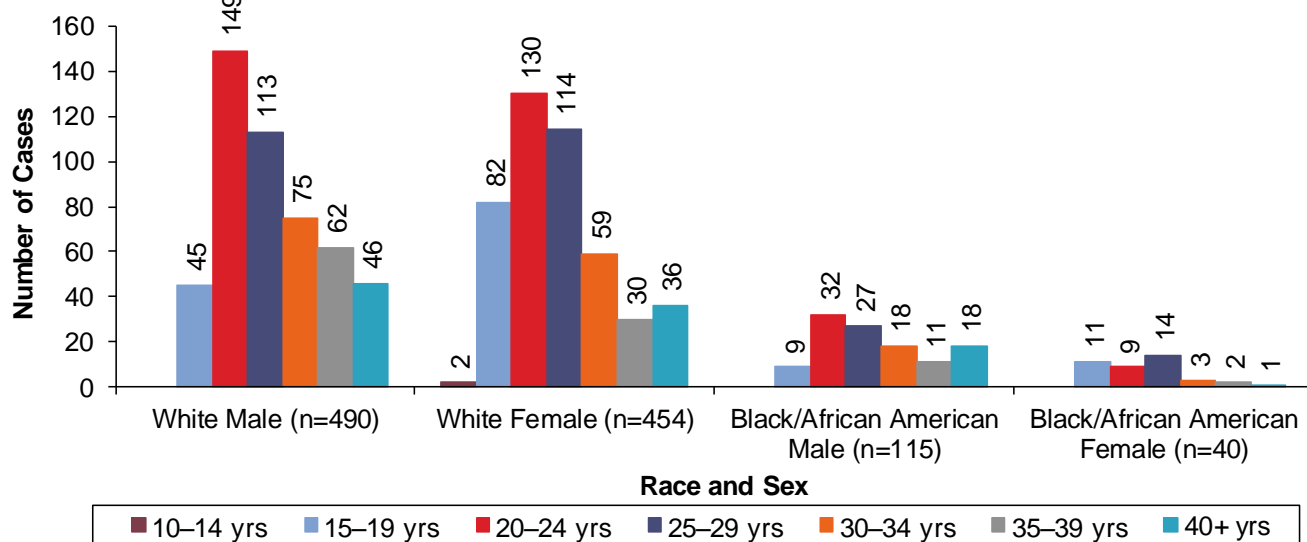
At the end of 2016, the largest proportions of heterosexual contact cases living with HIV disease were between 45 and 64 years of age (60%) (Table 14).

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for heterosexual contact cases (Table 15). In Pulaski County, blacks/African Americans comprised a larger proportion of living cases (78%) compared to other areas.

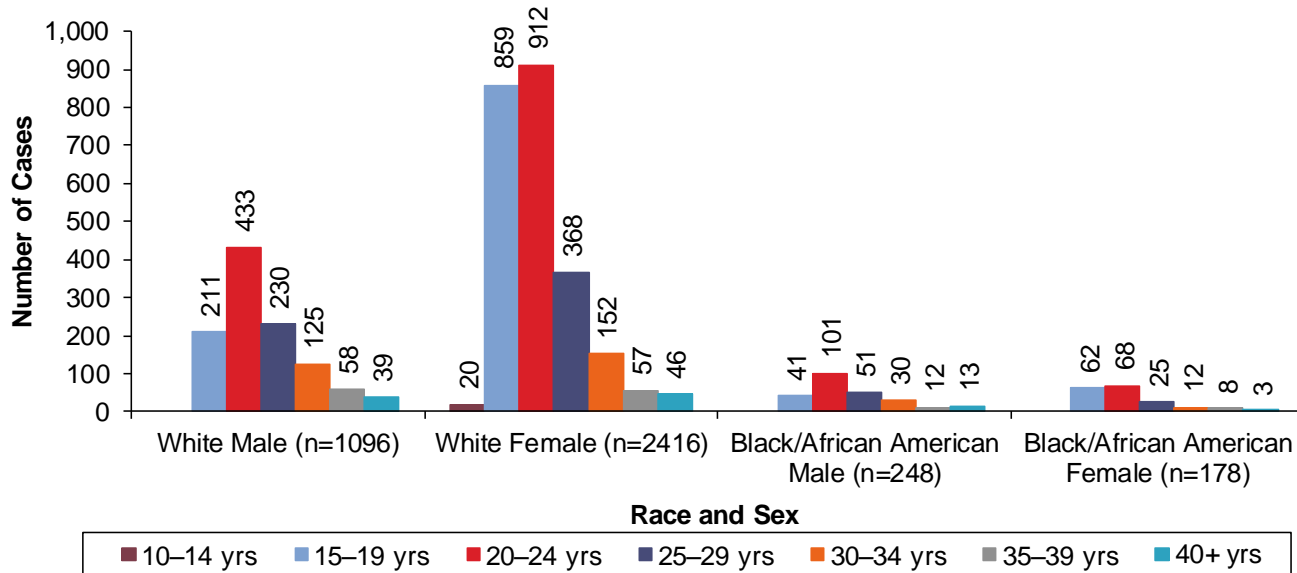
Figure 7. Reported P&S syphilis cases, by race and sex and age group at diagnosis, Southwest HIV Care Region, 2016**Figure 8. Reported early latent syphilis cases, by race and sex and age group at diagnosis, Southwest HIV Care Region, 2016**

In the Southwest HIV Care Region, the largest numbers of reported P&S syphilis cases were among white males (16) and white females (5) (Figure 7). The number of reported cases increased from 2015 to 2016 among white males (11 to 16), white females (1 to 5), and black/African American males (0 to 1). No P&S syphilis cases were reported among black/African American females in 2015 or 2016 in the Southwest HIV Care Region.

The largest numbers of reported early latent syphilis cases were among white males (23) (Figure 8). The number of reported early latent syphilis cases increased from 2015 to 2016 among white males (18 to 23) and black/African American males (0 to 1). The number of reported cases decreased from 2015 to 2016 among white females (3 to 1). No cases were reported among black/African American females in 2015 or 2016 in the Southwest HIV Care Region.

Figure 9. Reported gonorrhea cases, by race and sex and age group at diagnosis, Southwest HIV Care Region, 2016

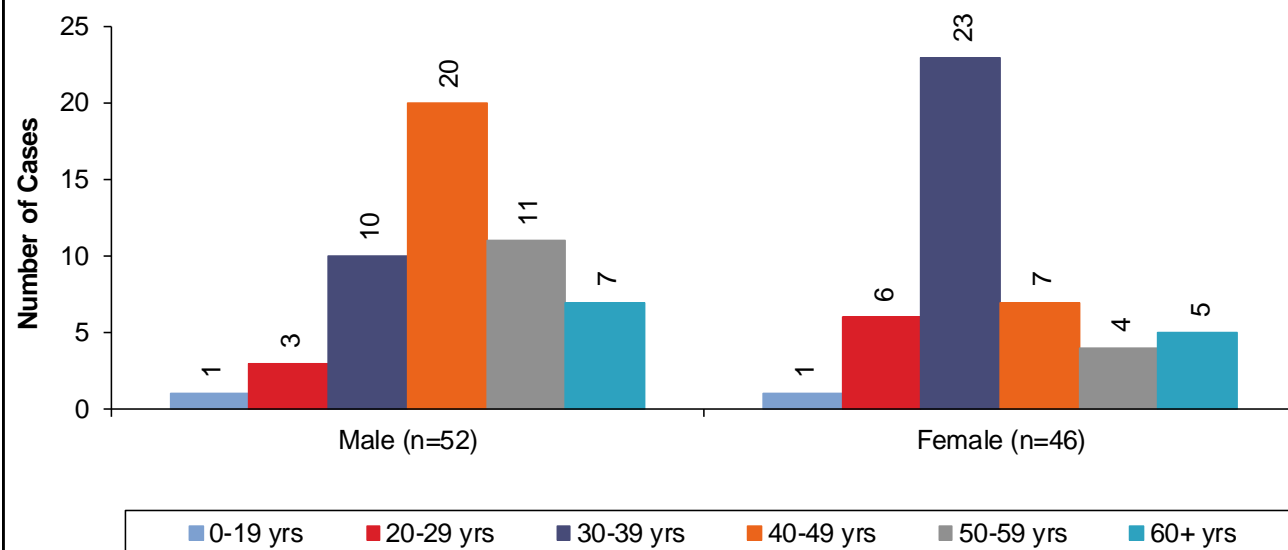
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

Figure 10. Reported chlamydia cases, by race and sex and age group at diagnosis, Southwest HIV Care Region, 2016

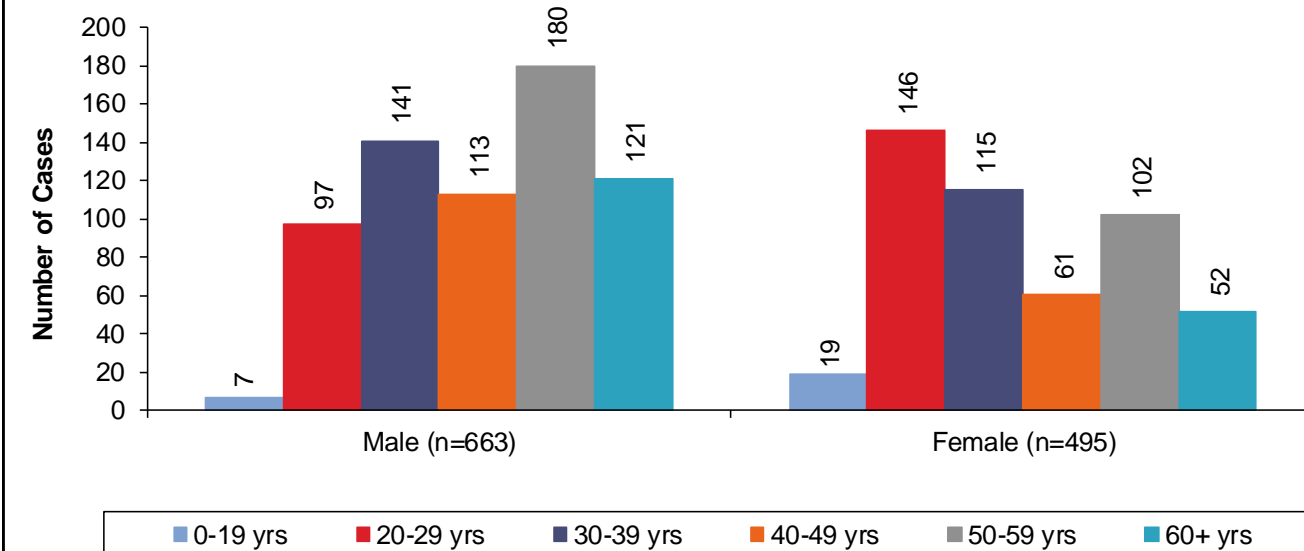
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest numbers of gonorrhea cases were reported among white males (490) and white females (454) in the Southwest HIV Care Region (Figure 9). Persons 20 to 24 years of age represented the largest numbers of reported cases among white males, white females, and black/African American males. Among black/African American females, the greatest proportion of reported cases was among persons 25 to 29 years of age.

The largest numbers of chlamydia cases were reported among white females (2,416) and white males (1,096) (Figure 10). Persons 20 to 24 years of age represented the largest number of reported cases among all race and sex categories presented.

Figure 11. Reported hepatitis B cases, by sex and age group at diagnosis, Southwest HIV Care Region, 2016

Note: Totals include persons whose age at diagnosis is unknown.

Figure 12. Reported hepatitis C cases, by sex and age group at diagnosis, Southwest HIV Care Region, 2016

Note: Totals include persons whose age at diagnosis is unknown.

There were 98 reported cases of hepatitis B in the Southwest HIV Care Region during 2016 (Figure 11). Males represented 53% of reported hepatitis B cases. There were differences in the age distribution of reported hepatitis B cases by sex. Among males, the largest number of cases was reported among persons 40 to 49 years of age. Those 30 to 39 years of age represented the largest proportion of hepatitis B cases among females.

In 2016, there were 1,158 hepatitis C cases reported in the Southwest HIV Care Region (Figure 12). Males represented 57% of reported hepatitis C cases. There were differences in the age distribution of reported hepatitis C cases by sex. Those 50 to 59 years of age represented the largest proportion of cases among males. Among females, the largest number of cases was reported among persons 20 to 29 years of age.